

56.6 IS ALWAYS FASTER. TRUE OR FALSE?

PREMIERE

ePLAY

The Leading Magazine of Multiplayer Gaming

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Premiere Issue
August 1997

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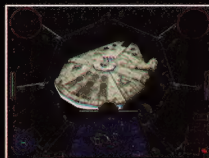
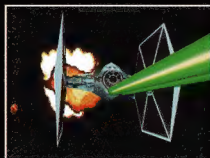
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IN X-WING VS. TIE FIGHTER
YOU WILL BATTLE
HEAD-TO-HEAD AGAINST
AN ENEMY MORE RUTHLESS THAN
JABBA THE HUTT
AND MORE SINISTER THAN
DARTH VADER.

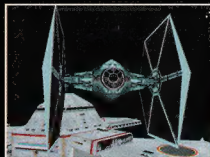
Today it's Floyd. Tomorrow, the greatest pilot in the *Star Wars*® universe could be a dentist in New Jersey. That's the beauty of *X-Wing vs. TIE Fighter*™. It allows you to engage in head-to-head combat against real people over modem, network and the internet. It's a real first, and it's in real time. The graphics have been galactically enhanced. The flight





(Floyd from Accounting.)

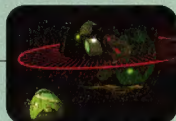
engine is phenomenal. The new missions are masterstrokes of space mayhem. There are even single player missions for an all-new explosive experience. No wonder *Computer Gaming World* proclaims **X-Wing vs. TIE Fighter** "number one on every space sim-er's wish list." And if you don't believe them, just ask Floyd. <http://www.lucasarts.com>



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ePlay (ISSN 1093-8389) is published bimonthly by The PC Press, Inc., Greensboro, NC 27401. Second-class postage paid at Greensboro, NC, and additional mailing offices. Newsstand distribution is handled by the Curtis Circulation Company, New Milford, NJ (UPC 71486-01167). Subscriptions: One year (6 issues) US: \$18.95. Canada: \$24.95 (US). Canadian price includes postage. Outside the US and Canada add \$2.00 (US) per issue. For customer service visit <http://www.eplay.com>. Postmaster: Change of address forms to ePlay Magazine, P.O. Box 37309, Des Moines, Iowa 50337-2309. Corporate, editorial, and advertising offices: ePlay Magazine, 249 East Friendly Avenue, Greensboro, NC 27401, or ePlay Magazine, Post Office Box 13739, Greensboro, NC 27415. Telephone: 910-272-0083. Fax: 910-272-0086. Email: email@eplay.com. Unsolicited manuscripts cannot be acknowledged or returned. Entire contents copyright 1997, The PC Press, Inc. All rights reserved. Reproduction or transmission by any means, in whole or in part, without written permission of the publisher is prohibited. ePlay Magazine is not affiliated with the companies or products it covers. Product and company names used herein are used solely for editorial purposes and may be the trademarks or tradenames of their respective owners.

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Online Is Where It's At

There's probably never
been a better time to be
a computer game fan.

It's not only because today's games look and sound better than anyone had dreamed possible just a few years back, although that's a definite plus. The real reason can be summed up in three words: online multiplayer gaming.

Thanks to the explosive growth of the Internet and the number of people going online, people from all over the world can meet and play their favorite games. What makes this even more exciting is that there's something for everyone in this new world of gaming. Strategy, action, simulation, fantasy, role-playing, board and card games—nearly every type of computer game can be played with or against someone else on the Internet. And because there are so many different services and networks carrying these games, finding a service to suit your budget and your tastes is getting easier with every passing day.

If you've already tried your hand at multiplayer gaming online, you know how thrilling it can be—but you've also probably found out that the road to multiplayer gaming happiness isn't always a smooth one. That's why we're here: to show you how to make the most of your online time, to help you pick which games are right for you, and to sort out the truth from the hype. But this is a two-way street—we need to know what you think is important to help us make **ePLAY** the comprehensive resource for multiplayer fans. You'll find the **ePLAY** editors' various mailing addresses in the staff box next to this text; feel free to write early and often with your comments, gripes, and suggestions.

But in the meantime, welcome to **ePLAY**—and let the games begin!

Stephen Poole
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August 1997

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Printed in the USA by R. R. Donnelley & Sons Co.

Submissions

Digital queries required. Submit query to email@eplay.com. Unsolicited material is not accepted, and **ePLAY** assumes no responsibility for such material.

Subscribers

Circulation list management services provided by Communications Data Services (CDS), a Hearst company, Des Moines, Iowa. To subscribe, or for change-of-address, or other customer service options, visit **ePLAY** at www.eeplay.com and click Subscribe.

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Getting Connected

► Stephen Poole

The explosion in online multiplayer gaming marks a new era in computer entertainment—but just because you can log onto the Internet doesn't mean you'll automatically experience gaming bliss. Here's our guide to help you understand what makes online

multiplayer gaming tick—and what you can do to ensure you get the most out of your online gaming time and money.



You've been reading about online multiplayer gaming for months, and you're ready to jump online and get in on the action. You've got a computer, you've set up an Internet account, and you've bought all the games you want to play online. You're ready to go, right?

Perhaps not. How much fun you have once you get online can be affected by a whole host of variables—but luckily there are steps you can take to control each of them.

The Right Stuff

If you've ever bought a computer game, you've doubtless seen the system requirements listed on the box—and if you've ever tried to run a game on a system that didn't exceed those require-

ments, you know how misleading they can sometimes be. Fortunately, most game publishers now list optimal

system requirements in addition to the minimum, giving you a much better idea how a game will run on your system. As a general rule, if a game runs well when you play the stand-alone version, it should play just fine online—and to get smooth game play out of today's crop of computer games, you should consider nothing slower than a Pentium running at 133MHz—and preferably a 166MHz or 200MHz. To round out the system, you should have at least 16MB RAM (32MB is much better), a video card with 2MB of memory, a 16-bit sound card, a 4X CD-ROM drive or faster, a 2 gigabyte hard drive or larger, and a 17" monitor (prices on these have come down considerably over the past year). The good news is that you can usually upgrade one component at a time, and even if you do buy a brand new system, you'll find that prices have plummeted to all-time lows.

Mac users should set similarly high standards, and thankfully the arrival of clone manufacturer PowerComputing has helped bring prices down considerably. A PowerComputing system based on the 604 chip and running at 150MHz with 24MB of RAM, 2MB video memory, a 2GB hard drive, a 17" monitor, and 20-watt speakers runs around \$2,450 as we go to press (if you order direct).

There's one component we haven't mentioned, however, and it's one that can make the

biggest difference in how much fun you have online: your modem. Obviously, a modem's bandwidth—the amount of data it can send and receive, usually measured in kilobits per second (kbps)—drastically affects how quickly you can load Web pages, and it can also determine how many players you can effectively compete against in a multiplayer game.

PLAY'S TIP

Some games show some improvements in online game play if you turn off error correction and data compression—something very easy for Windows 95 users to do. Go to Control Panel, double-click on the Modem icon, select Properties, click the Connection menu tab, then select Advanced. You'll see check-boxes labeled "Use error control" and "Compress data"; unchecking "Use error control" automatically unchecks "Compress data." Consult the game's documentation to see under what circumstances (if any) disabling error correction and data compression are recommended.

Bandwidth isn't the only part of the connection equation that determines how smooth your online gaming experience will be. The other critical component is what's known as latency, or the time it takes for data to be sent from one computer to another and for the response to return to the sender. If you have a latency of 400 milliseconds, for instance, that basically means that four-tenths of a second will elapse

The Most Dangerous Man is the One with Nothing Left to Lose.



When outlaws murdered your wife, and took your daughter, everything you had was gone. Your gut aches for blood and sweet revenge. *Dyin's too good for 'em now.*

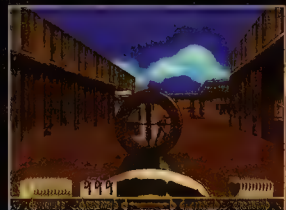


Ride back into the wild west as the gun-slinging Marshall James Anderson. You'll encounter a dusty town, an abandoned mine, a runaway train, and the orneriest cowpokes this side of the Mississippi as you uncover a twisted plot of greed and corruption.



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OUTLAWS

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- Multiplayer Shootouts

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"3D shooter and graphic adventure fans should be equally impressed...Should clean up when it moseys into town..." -PC Gamer

"This may be the first 3D shooter with a real plot..." -Computer Gaming World

"LucasArts seems to have stacked the gaming deck in its favor...Outlaws appears to be yet another winning hand." -Computer Player



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```
#2100MtrTrace www.epiplay.com
Tracing route to 192.168.1.1 over 12 hops:
over 12 hops: 0.00 sec
 1 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
 2 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
 3 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
 4 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
 5 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
 6 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
 7 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
 8 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
 9 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
10 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
11 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
12 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
```

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#2100MtrTrace www.epiplay.com
Tracing route to 192.168.1.1 over 7 hops:
over 7 hops: 0.00 sec
 1 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
 2 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
 3 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
 4 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
 5 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
 6 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
 7 192.168.1.1 0.00 sec 192.168.1.1 0.00 sec
```

One of the factors in latency is the number of "hops" your signal takes on its way from your computer to its destination—and that's affected by the backbone that your ISP is connected to. When connected to an ISP on the MCI backbone, for instance, our signal passed through 12 routers (left) before reaching Mplayer on the PSI backbone—but when we logged on to an ISP on the PSI backbone, it had to go through only seven hops (right).

between the time you perform an action—firing a weapon, deploying a unit, or dodging a tackle—and when you actually see the event on-screen. The sort of latency you experience when playing a game depends largely on your Internet Service Provider—but in certain instances latency can also be affected by the modem's bandwidth. Faster is always better, right? Wrong.

Intuition loses out on the bandwidth issue. Here's why:

"For games that send lots of small 'packets' of data during play—*Duke Nukem 3D*, for example—high-speed modems do suffer higher latencies than lower-speed modems," says Dave King, Chief Technical Officer of the Total Entertainment Network. "For example, a U.S. Robotics V.32 modem

(14.4kbps) will have around 10 milliseconds less latency (round-trip-time through 4 modems) than U.S. Robotics V.34bis modems (28.8kbps).

"The reason is because the higher-speed modems are implementing more complex modulation algorithms than the lower-speed modems. In addition, the signal/noise ratio is higher for the low-speed modems—the signal is cleaner—so there are less frame retransmissions or modem retrains at the lower speeds. But for games that send larger packets—*Quake* is a good example—the high-speed modems do deliver lower latencies because it takes less time to send and receive the packets at the higher transmission speeds, despite the fact that the overhead—the time the data spends being processed by the modem—has more latency."

In the end, though, your best bet is buying the highest bandwidth modem you can afford because latency is based largely on how your ISP is connected to the Internet. "It's not so much in the modem as it is in the way the ISP routes them to the service," says Morgan Schlaine of Engage Games Online.



Because *Duke Nukem 3D* sends many small packets of data during a multiplayer game, players with lower-bandwidth modems (14.4kbps) might actually get lower latency than those with 28.8kbps or higher-bandwidth modems.

"For example, one person can have a good connection to his ISP, but if it takes a long time for the information to get from the ISP to us and vice-versa, then that's where the latency comes from. It's all about Internet traffic."

There is one exception to the highest-bandwidth rule, though: You should probably hold off on purchasing one of the 56.6kbps modems that are starting to hit the market. Most ISPs won't be supporting 56.6kbps modems until a standard for the new technology arrives, which most likely won't happen until next spring. (For the complete scoop on 56.6kbps modem technology, check the "eLink" column elsewhere in this issue.)

ePLAY's TIP

If you're experiencing high latency or poor connections, you might try logging on at different times of the day—the heavier the traffic is on the Internet and on your ISP, the slower your connection.

If you're a fan of board and card games where everyone takes turns, high latency is merely an annoyance; if you like fast-paced action games, on the other hand, it can be the kiss of death. Probably the single biggest step you can take to ensure low latency is in selecting a high-quality ISP. But how do you know which ones are best?

The Right Partner

There are certain services you should consider essential when

choosing an Internet Service Provider (ISP): email, newsgroup access, the ability to use Telnet to log onto other computers on the Internet, and high-speed dial-up access (28.8kbps or faster). If you can find an ISP that offers extras such as a free personalized Web page or free storage on the ISP's server, more power to you.

But for gamers serious about Net-play, one of the most important differences between a good ISP and a bad one is how good a connection the ISP has to an Internet backbone. Internet backbones are the super-highways of the Internet—they're able to transmit 45 megabits of data per second, and he sooner data arrives from your computer to a backbone, the faster it reaches its destination.

Think of the flow of data from your computer to the game service—or human opponent you're connected to—as a car traveling from your home to a given destination and back again. If you have to travel five miles down four different two-lane roads before you get to the interstate, for example, it takes longer to get to your destination than if you'd traveled only two miles on two-lane roads to hop on that freeway.

But just having an ISP with a fast connection to an Internet backbone doesn't guarantee you'll have low latencies to every site on the Internet. If the game network or human opponent you're trying to connect to is

located on a different Internet backbone than the one your ISP is on, your data will have to cross an "exchange" and travel down a second backbone to reach its destination. There are basically two major "public" exchange points in the United States: Mae-East in Washington, DC, and Mae-West in San Jose, CA (though some of the larger backbones have their own private exchanges).

Fortunately, there are a couple of tools you can use to determine



TEN and Mplayer address the problem of latency in similar ways. TEN analyzes your Internet connection before pointing you to an arena that should provide you with the best possible play; once inside, you can access a graph chart of your latency history (top). Mplayer uses a color-coding system (bottom)—green game rooms should provide smooth game play, and red rooms are off-limits because your connection is much slower than your potential opponents'.

Essential Shareware Utilities

As you delve deeper into the world of the Internet and multiplayer gaming, you'll discover there are some programs you pretty much can't live without. Here are some of our favorites:

Kali:

The Kali front-end software costs \$20—but for your money you get a lifetime registration that provides you with free game play on any of over 300 Kali servers worldwide. On top of that, the Kali software (which enables almost any game with IPX network support to be played over the Internet) supports more games than all the other services combined. Achieving smooth game play can sometimes be a problem for “twitch” games, though. (<http://www.kali.net>)

Quake Spy:

A must for *Quake* fans. This nifty freeware program retrieves a list of *Quake* servers, then pings each one to find out which one is closest to you in cyberspace—i.e., the lowest ping times. And there's no charge to play on any of the *Quake* servers *Quake Spy* locates! (<http://www.quakespy.com>)

WS_FTP32:

While you can use Netscape or Internet Explorer to download files from FTP sites, our experience has shown that a dedicated FTP program such as WS_FTP 32 usually provides faster downloads.

(http://www.csra.net/junodj/ws_ftp.htm)

MIRC:

One of the more popular ways to set up multiplayer games on the Net—particularly those that require you to type in the Internet Protocol (IP address) of your opponent—is to meet in an Internet Relay Chat (IRC) room. MIRC is a freeware program that allows you to do just that, and it's pretty easy to use if you read the documentation. (<http://www.mirc.com>)

Forte Free Agent:

or WinVN: Newsgroups can be an invaluable source of information on games. Besides reading what other gamers think of new games or services, newsgroups can help you keep on top of such things as bug patch releases and game upgrades. Once you use either of these, you'll never use your Web browser to read newsgroup postings. (WinVN: <http://www.ksc.nasa.gov/software/winvn/winvn.html>; Forte Free Agent: (<http://www.forteinc.com/forte>)

WinZip:

You'll be downloading plenty of compressed files during your quest for online gaming glory, and WinZip is pretty much the defacto standard decompression (and compression) program.

(<http://www.winzip.com/WinZip/winzip.htm>)

Internet Gaming Zone:

Download Microsoft's software for the Internet Gaming Zone and you can take advantage of free matchmaking services for several of Microsoft's retail games, as well as enjoy eight free board and card games. Check out our feature on the IGZ elsewhere in this issue.

All of these sites can be easily linked from ePlay's homepage at www.eplay.com.

(Note: Programs specified as shareware can be used for evaluation purposes, and require a registration fee if you intend to use the product. Registration usually means you receive a full-featured version of the software.)

how good your existing Internet connection is. The first is the “ping” command, which shows you the round-trip times (latency) for packets of data to be sent from your computer to an Internet site. The other is the “tracert” command, which shows you exactly which backbones and routers your signal is being shuttled through on its way to an Internet site.

To use the “ping” command in Windows 95, establish an Internet connection, then click the Start button and select Run; in the dialog box, type PING followed by the Internet site: PING www.mplayer.com, for instance, or PING www.ten.net.

Tracert works the same way—TRACERT www.gamesonline.com or TRACERT www.gamestorm.com (these commands are *not* case-sensitive). A newer PING utility is available for downloading, by the way, at www.microsoft.com.

Another measure of the quality of your Internet connection for game play is packet loss, or data that never reaches a game server or another player in a game—and those two commands can help you find that out, too. “Both ‘tracert’ and ‘ping’ can give you a good indication as to the quality of your connection,” says Mpath's Rothschild. “Each asterisk (*) displayed in a TRACERT report indicates a dropped packet, while PING indicates a dropped packet by printing ‘request timed out.’ A high percentage of dropped packets will degrade most Internet game play.”

But finding out what type of latency and packet loss you'll experience on different ISPs is not



Thanks to an aggressive pricing strategy—free matchmaking support for many retail games and a mere \$29.95 per year for full access to the service—Mplayer has seen an impressive growth in membership. Whether the service can derive enough revenue from advertising to stay profitable remains to be seen.

a simple task, as Rothschild points out. “It’s very difficult to survey all ISPs for their appropriateness to Internet gameplay without individually signing up to each ISP and running a series of pings. The reason is that latency is a combination of configuration of modem terminal servers, the type of modem that the ISP uses, the configuration and loading of routers at the ISP, and the configuration and loading of routers between the ISP and the rest of the Internet.”

So how do you decide on the ISP that’s best for your gaming needs? Morgan Schlaline says “typically, ISPs are going to be better than online services such as AOL and CompuServe, and it’s always better to call into a phone number that isn’t busy very often. Frequent busy signals usually indicates heavy usage on this line, which can cause problems, too.”

When choosing an ISP with game performance in mind, though, your selection is largely dictated by which services you’ll

be playing on—and it all comes back to the issue of backbones. Keeping data on a single backbone is almost imperative for fast-action “twitch” games such as *Quake* and *Duke Nukem 3D* to be playable over the Net; to that end, most of the commercial

gaming networks have established relationships with various ISPs that are located on the same backbone as their service. These relationships have another advantage to speed game play: Game data takes priority over “mundane” transmissions such as email or Web access.

Mplayer, for instance, is located on the PSI backbone, and therefore users whose ISPs are connected to the PSI backbone—MindSpring, WebBullet, and PSI—will get the lowest latencies on Mplayer. TEN users who use the Concentric Network for Internet access will see lower latencies, as will Engage users; gamers whose ISPs are on the MCI backbone will see lower latencies to EarthLink’s arena than those who enter the service from another backbone.

If you’ve not decided on a particular gaming service, or if you plan to play on game sites and/or against human opponents who are on various backbones,



<http://www.engagegames.com/interworld/mageatom/index.html>

Because of fairly high rates (\$1.95 per hour) and the lack of megahits such as *Quake*, *Red Alert*, or *Diablo*, Engage has not enjoyed the sort of traffic found on cheaper services such as Mplayer.

your best bet is to go with an ISP that's connected to more than one Internet backbone. This will maximize the chances that your data won't have to cross an exchange from one backbone to another. And Rothschild says you should try to find out if an ISP you're considering "is well-connected to MAE-EAST or MAE-WEST, since most game services have servers located right near both of those interconnects."

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The big question now is where you'll go to play. There are essentially two types of gaming networks: matchmaking services that allow owners of retail games to play them online (TEN, Mplayer, Internet Gaming Zone), and "online-only" services that give you the game software free of charge but charge you an hourly rate to play. Some of the services, like TEN and Microsoft's Internet Gaming Zone, provide both types of play. On the preceding page, we take a look at the major gaming networks presently up and running as we go to press, detailing what games are supported and the pros and cons of each network. Remember, these ratings are subjective—since many networks offer free trial periods, we strongly suggest that you give the ones in which you're interested a test run. As a general rule, you can expect to pay considerably more on services that provide online-only content—but if you get hooked on a particular game, you'll probably pay up with a smile. Consult "Introduction to Reviews" page in this issue for specific information on the var-

ious services. Also refer to each service's Web site for any changes.

As you can see, there are a lot of ways to spend money on online gaming. But that could be changing, as more and more game publishers start creating game servers to offer owners of their retail products a place to meet and play online.

Westwood Studios, for instance, created *Westwood Chat* to allow owners of *Monopoly*, *Command & Conquer: Red Alert*, or *Command & Conquer Gold Edition* to set up one-on-one matches free of charge. *Diablo*, from Blizzard Entertainment, is one of the hottest Multiplayer games around, due in no small part to Blizzard's free Battle.net service. As long as you have an Internet connection, you can log on and play with (or against, if you're not the cooperative type) up to three other players. And Sierra On-Line has been busy expanding its Sierra Internet Gaming System (SIGS), a proprietary interface which allows players to chat and set up Multiplayer games of *Power*

Chess, *Trophy Bass 2*, *Front Page Sports: Football Pro 97*, *Hoyle Blackjack*, *Hoyle Poker*, *Hoyle Casino*, *Shivers 2*, *Dr. Brain 4*, and *Mission Force: Cyberstorm*.

Just the Beginning ...

The beautiful thing about online multiplayer gaming is that it's only going to get better. Sure, you might run into some problems your first few times out—but once you experience the thrill of competition against other gamers putting it all on the line, you'll be more than willing to weather a few rough spots. And as more developers explore the unique things that can be done with online multiplayer games, we'll see new designs and features that we never dreamed of before.

But enough speculation as to the future. There's a lot of fun to be had online right now—and if you shop around, it needn't cost an arm and a leg to get in on that fun. See you online!

©

The screenshot shows the GameStorm website interface. At the top, there's a search bar with the text "Select a game:". Below it, a navigation menu lists "On your mark, get set... choose!" and "Select a game from the above pull-down menu. Any time you wish to cancel your membership, change your e-mail address or other account information, hit Account Information below to effect the changes. Have fun and bookmark this page for easy access!".

The main content area displays several game listings, each with a "DOWNLOAD" button and a brief description:

- [Online Casino™]** DOWNLOAD: Play poker in a game designed by renowned casino players.
- [Hannover Online™]** DOWNLOAD: Navy strategists use this for training.
- [Classic Cards™]** DOWNLOAD: Hearts, Bridge, Spades and Whist.
- [Legends of Kismet™]** DOWNLOAD: Adventure / Role Playing.
- [Air Warrior 2.0 Online]** DOWNLOAD: "The realism is unsurpassed." — Time magazine. "Air Warrior is the ultimate choice when it comes to mass multiplayer dogfighting." — PC Gamer.
- [BattleTech®: Solaris]** DOWNLOAD: 1994 Online Game of the Year. "A MechWarrior's dream come true." — *Joost Magazine*.

At the bottom right, there's a large red button labeled "GAME STORM" with a stylized flame effect.

The result of a collaboration between Kismet Corporation and TV Guide, the recently formed GameStorm offers Arles Online Games such as *Air Warrior II* and *Multiplayer BattleTech: Solaris*.

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es are Command & et, Command & Conquer, and Warcraft: Mplayer Free e, Quake, Capture the Flag erable, Risk, Panzer iacing (shareware and erminial Velocity, battleship

olemaster: Magestorm, ertball, Darkness Falls, Virtual eelboard Live

, plus: Air Warrior, Air yler BattleTech: Solaris, ssic Card Games (hearts, ontract bridge), Legends of .Online, BlackJack (beta ed (beta testing).

poon Online, Classic Card oades, whist, contract f Kesmai, Air Warrior II, echn: Solans.

ebender, Monster Truck ft Golf 3.0, Outlaws, and rd and card games (spades, ackers, chess, etc.). Fighter irst online-only game, will be is summer. Pricing is still

Drakkar, Empire Builder, Garden, Minion Hunter, Backgammon, IPX Simulator y a variety of games that play capability).

Pros

Good variety of game types, excellent organization of support files, ranking system for several games, and a friendly and informative technical support staff. New pricing effective May. Check Web site for details.

Mplayer Free Zone offers support for a slew of retail games at no charge, and if you do choose to play games in the Mplayer Plus area it's only \$29.95 a year. Mplayer also has a voice-chat feature so gamers can engage in real-time conversations before and after games.

Web-based interface makes it simple for newbies to get up and running, and all the game software (except for Warcraft II) is offered for download free of charge.

Multipayer BattleTech: Solans, the Air Warrior games, and Legends of Kesmai have devoted followings, and because they were designed specifically for Internet play they're not as sensitive to high latency as retail games. There's also no charge for the game software.

Legends of Kesmai, Multipayer BattleTech: Solans, and Air Warrior II are all first-rate multiplayer games.

Currently there's no charge to play the Zone games, and Microsoft says it never will charge for the classic board and card games or for users who want to play supported retail games on the Zone. There's a lot of traffic in the board and card game areas—and the software for those games is offered free of charge.

You're only billed \$4.95 for the first month and \$9.95 per month thereafter, making this one of the most affordable gaming networks on the Net.

Cons

Latencies tend to be too high for smooth gameplay unless you're accessing TEN through the Concentric Network—and non-Concentric Network subscribers have to pay a \$.95 hourly surcharge to use a Concentric dialup number for TEN.

Support files could be more centralized.

Fairly high hourly rates have kept the service from achieving a large user base, especially since a couple of the games (Warcraft II, Descent) can be played free of charge on Kali, except for Warcraft II, the service currently lacks a megahit to draw new gamers.

With EarthLink subscribers paying \$2.25 per hour and non-EarthLink subscribers paying \$2.75 per hour, there are often not very many people online to compete against.

After the first four hours, game time runs three cents per minute—almost as high as Engage's prices (and with some games, the only way to practice is to log on and be charged). The service launched as we went to press, it remains to be seen how many users it attracts.

Needs to support more retail games to draw a greater number of users.

The only game that sees much traffic is The Kingdom of Drakkar—most of the games are two or three years old (and show it). The interface is a bit confusing, but flat rate means you can get acquainted with gameplay without having to worry about excessive online bills.

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The big question now is where you'll go to play. There are essentially two types of gaming networks: matchmaking services that allow owners of retail games to play them online (TEN, Mplayer, Internet Gaming Zone), and "online-only" services that give you the game software free of charge but charge you an hourly rate to play. Some of the services, like TEN and Microsoft's Internet Gaming Zone, provide both types of play. On the preceding page, we take a look at the major gaming networks presently up and running as we go to press, detailing what games are supported and the pros and cons of each network. Remember, these ratings are subjective—since many networks offer free trial periods, we strongly suggest that you give the ones in which you're interested a test run. As a general rule, you can expect to pay considerably more on services that provide online-only content—but if you get hooked on a particular game, you'll probably pay up with a smile. Consult "Introduction to Reviews" page in this issue for specific information on the var-

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service's Web site for As you can see, there are a lot of ways to spend money on online gaming. But things are changing, as more and more game publishers start offering game servers to offer their retail products meet and play online.

Westwood Studios, for instance, created *Warcraft* to allow owners of *Warcraft: Command & Conquer* or *Warcraft: Command & Conquer: The Lord of the Rings Edition* to set up one-on-one matches free of charge from Blizzard Entertainment, one of the hottest multiplayer games around, due in part to Blizzard's free service. As long as you have an Internet connection, you can log on and play with (or against) up to three other players. Sierra On-Line has also expanded its Sierra On-Line Gaming System (SOGS) to a graphical interface which allows players to chat and play Multiplayer games.

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Format

Games supported

Pros

Cons

Total Entertainment Network (TEN)

Mainly retail games, though a couple of titles have been designed specifically for online play

Advanced Dungeons & Dragons Dark Sun, Command & Conquer, Command & Conquer: Red Alert, Deadlock, Diablo, Duke Nukem 3D (shareware and retail), Duke Nukem Plutonium/Atomic, Master of Orion II, Panzer General, Quake, Warcraft

Good variety of game types, excellent organization of support files, ranking system for several games, and a friendly and informative technical support staff. New pricing effective May. Check Web site for details.

Latency takes time to do high-speed smooth gameplay unless you're accessing TEN through the Concentric Network—and non-Concentric Network subscribers have to pay a \$.95 hourly surcharge to use a Concentric dialup number for TEN.

Mplayer

Retail games

Mplayer Plus games are Command & Conquer: Red Alert, Command & Conquer, Diablo, Deadlock, and Warcraft: Mplayer Free games are Scarab, Quake, Capture the Flag (Quake variant), Scrabble, Risk, Panzer General, Big Red Racing (shareware and retail), WarWind, Terminal Velocity, MechWarrior 2, Battleship

Mplayer Free Zone offers support for a slew of retail games at no charge, and if you do choose to play games in the Mplayer Plus area it's only \$29.95 a year. Mplayer also has a voice-chat feature so gamers can engage in real-time conversations before and after games.

Support files could be more centralized.

Engage

Online-only (with the exception of Warcraft II)

Descent Online, Rolemaster: Magestorm, Warcraft II, Splatterball, Darkness Falls, Virtual Pool, Castles II, Billboard Live

Web-based interface makes it simple for newbies to get up and running, and all the game software (except for Warcraft II) is offered for download free of charge.

Fairly high hourly rates have kept the service from achieving a large user base, especially since a couple of the games (Warcraft II, Descent) can be played free of charge on Kali, except for Warcraft II, the service currently lacks a megabit to draw new gamers.

EarthLink Arena

Online-only (with the exception of Air Warrior II)

All Engage games, plus: Air Warrior, Air Warrior II, Multiplayer BattleTech: Solaris, Casino Poker, Classic Card Games (hearts, spades, whist, contract bridge), Legends of Kesmai, Harpoon Online, BlackJack (beta testing), Catchword (beta testing).

Multiplayer BattleTech: Solaris, the Air Warrior games, and Legends of Kesmai have devoted followings, and because they were designed specifically for Internet play they're not as sensitive to high latency as retail games. There's also no charge for the game software.

With EarthLink subscribers paying \$2.25 per hour and non-EarthLink subscribers paying \$2.75 per hour, there are often not very many people online to compete against.

GameStorm

Online-only (with the exception of Air Warrior II)

Online Casino, Harpoon Online, Classic Card Games (hearts, spades, whist, contract bridge), Legends of Kesmai, Air Warrior II, Multiplayer BattleTech: Solaris.

Legends of Kesmai, Multiplayer BattleTech: Solaris, and Air Warrior II are all first-rate multiplayer games.

After the first four hours, game time runs three cents per minute—almost as high as Engage's prices (and with some games, the only way to practice is to log on and be charged). The service launched as we went to press, it remains to be seen how many users it attracts.

Microsoft's Internet Gaming Zone

Both retail and online-only

Close Combat, Hellbender, Monster Truck Madness, Microsoft Golf 3.0, Outlaws, and eight classic board and card games (spades, backgammon, checkers, chess, etc.). Fighter Ace, Microsoft's first online-only game, will be up and running this summer. Pricing is still being determined.

Currently there's no charge to play the Zone games, and Microsoft says it never will charge for the classic board and card games or for users who want to play supported retail games on the Zone. There's a lot of traffic in the board and card game areas—and the software for those games is offered free of charge.

Needs to support more retail games to draw a greater number of users.

MP6-Net

Both retail and online-only

The Kingdom of Drakkar, Empire Builder, Operation Market Garden, Minion Hunter, Imperium, Junta, Backgammon, IPX Simulator (allows you to play a variety of games that have IPX network play capability).

You're only billed \$.45 for the first month and \$.95 per month thereafter, making this one of the most affordable gaming networks on the Net.

The only game that sees much traffic is The Kingdom of Drakkar—most of the games are two or three years old (and show it). The interface is a bit confusing, but flat rate means you can get acquainted with game-play without having to worry about excessive online bills.



You'll Never Be Lonely Again

Neil Randall

A new generation of games that can only be played online will arrive soon on the Internet—and multiplayer gaming has never looked so friendly.

Funny what you find out, if you just wait long enough. Three and a half years ago, when Netscape didn't exist and the Web itself was barely off the ground, the Internet belonged to researchers and academics. Two years later, Bill Gates and the rest of corporate America started climbing on the Web wagon, and suddenly the Net belonged to Business. But now we're finding out that it doesn't belong exclusively to any of these groups. Instead, the Internet is rapidly becoming what it should have been: a great place to play games

So what do you do when you have huge numbers of people hooked together across numerous networks? If you're forward-looking and enterprising, you give them a place to play. You create a pleasant world, send out a blanket invitation, and see who shows up. And you design your game for lots of simultaneous players. Not just two, or four, or even eight people. Instead, you try to attract hundreds, even thousands of gamers, and let them prowl your creation. Together, getting to know each other, any time they want. This is the

world—or worlds—of super-multiplayer online gaming. In fact, many people feel this is the true definition of multiplayer. Granted, there will always be scores of gamers eager to enlist for head-to-head dogfights, and 16-player *Quake* bashes are surely here to stay. Still, it's hard to deny that super-multiplayer online gaming has the numbers necessary to fuel amazing growth. In games such as *Ultima Online*, *Meridian 59*, and *Legends of Kesmai*, "multiplayer" is really a vast understatement, meaning dozens, hundreds (even thousands of players all enjoying



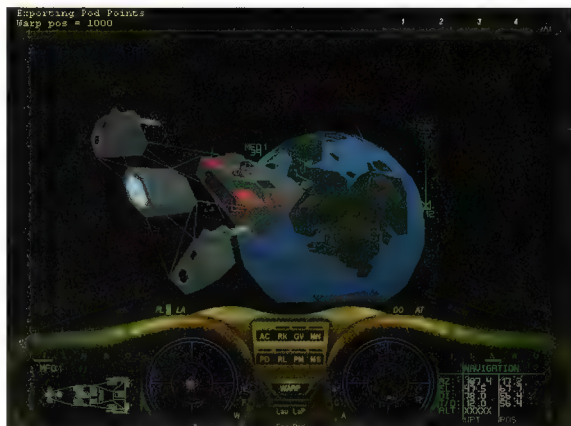
the exact same game at the same time. It's like a great big electronic party happening 24 hours a day, every day, with participants doing more or less what they want inside a make-believe world.

And the "do-what-you-like" ethic is at the heart of this mass entertainment activity. You don't play a super-multiplayer online game (let's call them SMOGs) primarily for the sake of competition. Instead, you play one for the joys of cooperation and collaboration—in short, its communal aspects. Yes, there are things to do. Yes, there are rules. But the whole point of super-multiplayer online gaming is *interaction*: not just with technology, but with other human beings. These games are about people—and if you aren't a "people person," it's unlikely you'll discover just how much enjoyment this type of gaming has to offer.

What Are SMOGs?

SMOGs are networked computer games played simultaneously by 50 or more people in a persistent game universe. Actually, 50 is an arbitrary figure—the number varies depending on who you're talking to—but generally the accepted minimum seems to be a few dozen. The main point is that these games accommodate hundreds or thousands of simultaneous players, so for our purposes we'll make 50 the minimum number of players (at least until someone seriously objects).

Every bit as important as the number of players is the concept of a "persistent" game universe. To play these games, you log



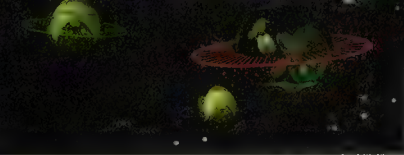
I-Magic Online's next MEGApayer game is *Planetary Raiders*, a space-combat and trading game that will support even more players than *Warbirds*.

onto the computer system that hosts them (called a server or server set), enter the game universe, and play within the rules of that game's fictional world. But when you log off and leave the game, the game universe keeps going (it persists). Other players make things happen, events transpire, and problems get solved, all without your involvement—and when you reenter this fictional world, you can expect that life there will have changed during your absence. In this way, SMOGs are just like reality. When you go away on vacation, people and places don't lapse into suspended animation, waiting for your return: Life just keeps happening.

The games themselves comprise the usual genres. Fantasy role-playing games (RPGs) place you in a world of magic, monsters, and hand-to-hand combat.

A science-fiction strategy game might be set on a starship, at the controls of a colonizing civilization, or within the armor of a bionic warrior. Air-combat games give you the skies over the Pacific in World War II, or Europe in World War I. Any other fictional universe is possible, too.

A quick sampling of the earliest SMOGs shows how wide-ranging they promise to become. Aries Online Games offers *Air Warrior* (WWII air combat), *Harpoon Online* (modern naval combat), *Stellar Emperor* (space battle and conquest), and *Legends of Kesmai* (fantasy role-playing). I-Magic Online features *Warbirds* (WWII air combat) and *Planetary Raiders* (space battle and conquest). VR-1 has the *Sarac Project* (undersea colonies) and *Air Attack* (WWII air combat). Nor are the big game companies ignoring this new phenomenon.



Origin Systems has taken its hugely popular *Ultima* world into the super multiplayer arena with *Ultima Online* (fantasy role-playing). From Sierra comes *The Realm* (fantasy role-playing). Meanwhile, 3DO has its huge *Meridian 59* up and running, with a major upgrade planned for this summer.

► People ... who need people ... ◀

But why get into a SMOG, rather than buying a stand-alone fantasy, science fiction, or air combat game? Simple. With SMOGs, you don't get just the game universe; you get scores of people exploring it and changing it with you. The air mission isn't limited to you and a squadron of computer controlled allies—it's you and a squadron of real people, all with their own quirks, goals, and likes and dislikes—flying against other real people in the enemy planes. In a fantasy world, you don't control a party of adventurers, only the character you're portraying. Interestingly, the human-controlled characters who join your quest might stick with you, argue with you, leave you, or even stab you in the back. And when you're trying to conquer and colonize that neighboring star system in the science fiction game, you'll quickly discover that your allies might not like your imperialist plans and that your enemies don't at all behave the way a computer opponent acts.

It's impossible to overemphasize the human element in all of this. Whatever else you do in a SMOG—finding the magical artifact, tracking down enemy space ships, keeping in formation with the other Spitfires—the major reason players return to these

games over and over again, sometimes night after night after night, is to spend time with the other players. In *Ultima Online*, you can chew the fat in the tavern while quaffing your favorite virtual brew (at the risk of getting virtually drunk, it should be noted). In *Warbirds*, you can chat with one another while flying a mission. In all these offerings, in fact, the social aspect is crucial to the ongoing success of the game.

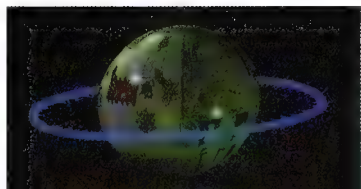
But so is the game itself, because if all you wanted to do is hang out with your friends, you'd head for a chat room instead. Chat is free, but chatting during a game very often isn't. What you're doing in a great many of these games is role-playing, whether it's in a role-playing game or not. In effect, you become a fighter pilot or a fantasy hero or a conquering explorer, and you don't stop being that just because you're suddenly chatting as yourself. In chat rooms, people regularly adopt personae; in game chat, one of the goals is often to abandon the assumed persona. This isn't so easy, however, because you're still inside that game universe, and you can't get rid of it completely. For most people, their game identity is activated the very second they log on.

Designing a stand-alone computer game is usually an attempt to merge outstanding graphics and audio effects, create challenging artificial intelligence, and provide plenty of replay value. But strange things happen when designers move onto the SMOG stage. Suddenly, the multimedia isn't quite as important, the artificial intelligence isn't nearly as critical a part of the game, and the replay value comes from entirely new sources.

All of these changes stem from one simple fact: You're playing with other people, and those other people become a large part of your focus. You suddenly find that you can live with images that are considerably less than photorealistic. You also find that AI isn't a significant issue, because most of the characters you meet and compete with are human. As for replay value, the solution is inherent: The game draws you back because your newfound friends are there. Yes, the game itself has to appeal to you, but even a bad evening in virtual skies or digitized dungeons can be made enjoyable through old-fashioned camaraderie.

► Gaming as it was meant to be? ◀

It's tempting to suggest that SMOGs represent a return to the "Golden Days of Gaming," before the Atari 2600 and the Apple II changed the nature of gameplay forever. Until those machines came along, playing games meant playing with somebody. True, there were pinball machines and slot machines centered around solo play, but these diversions usually weren't found in private residences. Likewise, pool tables, dart boards, and the like let you practice on your own, but the only reason you did so was because there was nobody around to provide you with direct competition. Before computers, you sat down with a friend to a game of chess, *Stratego*, or *Panzergruppe Guderian*, or with several friends to a game of



Monopoly, Scrabble, Diplomacy, or Dungeons and Dragons. Games were social events.

SMOGs take that social aspect to a whole new dimension. Even the most populated *D&D* games rarely exceeded eight players, and when big groups of players did get together (at conventions or gaming clubs), they typically broke into smaller groups. The fact is that SMOGs demand the technology of networked computers in order to function at all. There's simply no other way to gather hundreds of people from all over the world to play in an invented world according to a specific set of rules and guidelines, working in concert with many (or a few) other players and doing largely whatever they feel like doing.

Even so, SMOGs aren't a brand new idea. Internet gamers have been playing adventures simultaneously with many other gamers for several years, in the form of MUDs (Multi-User Dungeons). There are two big differences between these new offerings and those. First, SMOGs offer graphics, while MUDs are almost exclusively text-based (in the style of the old *Zork*-like text adventures). Second, SMOGs cost money to play, while MUDs don't. For the money, you get not only better-looking games, but commitment from game publishers. MUDs, which are labors of love, can disappear without warning; that's much less likely with SMOGs, because money changes hands and the developers earn their living designing these games.

Let's take a look at some of the companies leading the way to this new generation of SMOGs.

► ARIES Online Games ◀

ARIES Online Games is one of two subsidiaries (the other is Kesmai Studios) of Kesmai Corporation, based in Charlottesville, Virginia. Aries itself is a relatively new creation, but Kesmai has been in business for 16 years, offering games such as *Air Warrior* and *Legends of Kesmai* on such online services as America Online, CompuServe, and GEnie. Therefore, Aries can claim to be the first in the SMOG business. And this ain't no junior start-up company, either: Kesmai Corporation is owned by News Corporation, which is in turn owned by media mogul Rupert Murdoch. The good news, therefore, is that they have lots of money. The bad news is that they have to keep making lots more.

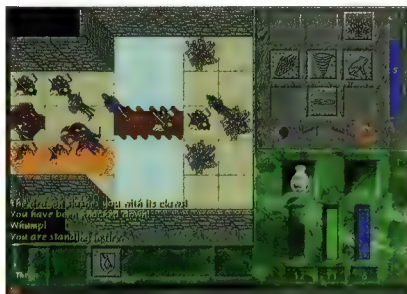
Chris Holden, Kesmai's CEO, insists that the super-multiplayer game is the only online game that makes economic sense. "Kesmai is a profitable company," he says, "and it's the only company of this type that can say that. The reason is that we're sticking to massively multiplayer gaming, and because we're taking the games to places where people are already gath-

ered, such as AOL and the big ISPs." He suggests that the TEN and MPATH models—which provide matchmaking services so owners of retail computer games can play over the Internet—can't work, because "you can't build your own island in the middle of the ocean and expect people to find it." As for head-to-head online gaming, Holden suggests that the economics aren't in these services' favor. Only the SMOG idea can generate the kind of revenue necessary to stay in the black.

He offers some benchmarks. "Last month, on one service alone, AOL, we had approximately 600,000 unique users playing the game. Compare this to TEN, who has signed on 25,000 users, when they need 125,000 to break even." Why is this important to you, the multiplayer fan? Holden points out that profitability means some kind of security (the game will stay around), but more importantly that "every night there are literally thousands of people out there to play with."

The entire premise of Aries'

designs, says Holden, is that "we're trying to create large, persistent universes centered around gamers. The game becomes a social context for people, whether it's *Air Warrior* or *BattleTech*, or even a slower game without all the technological tricks." He believes



Legends of Kesmai, a massive fantasy role-playing game from Aries Online Games, allows players to band together for friendship and protection as they travel through the game world.



Air Warrior II gives PC pilots the chance to dogfight in planes from World War I, World War II and the Korean conflict. Each arena in *Air Warrior II* can accommodate up to 120 combatants—good thing the stand-alone version of the game lets you fly in six historically-based campaigns as practice.

that players return to these games for a variety of reasons, “but in the end what really keeps people coming back is the content their friends and associates have generated.” In other words, the game is there to be played, but the human interaction continually changes the universe, and that’s a large part of what draws people back. “The way we get people to come back is to make a space for them that is so enjoyable and compelling that they have to make a conscious decision every night *not* to log on to see what their friends are doing.”

Holden is impatient with the idea that latency is the key to successful over-the-Net games.

“We’re sick and tired of hearing the hype going to the people who work on latency,” he says. “So much is written about getting latency down to get a fast-action twitch experience, but we know that latency is a fact of life. What you *can* do is invest your time and money in designing your games so they minimize the impact of latency.” He claims that Aries’ action games do just that. “In *Air Warrior* and *BattleTech*,

you feel as if you’re in a fast-action twitch game, and that’s what’s important.”

Because of Aries’ installed-player base, Holden suggests that the company’s future is less about finding a new audience than in “building better games with lower learning curves, so that more people can play them without feeling they need a Ph.D. or a pilot’s license.” Along those lines, this year

Aries will work with Accolade to debut *Jack Nicklaus Online Golf World*. “I’ll bet you this will be the most popular gaming experience available,” he says, “because golf is the one of the most popular games in the world.” That popularity means that the game can tap into “these huge robust communities of people,” and that’s where Aries is clearly headed.

► I-Magic Online ◀

Robert Salinas formed Interactive Creations Inc. (ICI) in Grapevine, Texas with John MacQueen and Dale Addink in 1995. But their work on Internet-only games began back in 1993, when, according to Salinas, “We went off to change the way everyone thought about Internet gaming.” In Internet circles, of course, 1993 was a long, long time ago, so Salinas is perfectly justified in

claiming, “We’re the fathers of this. Other companies were doing it on direct networks before—in fact, we met through playing the Kesmai games—but we’re the ones who first designed for the Internet.” All three founders remain with the company: Addink is president, MacQueen vice-president of operations, and Salinas vice-president sales and marketing. ICI has recently merged with Interactive Magic (I-Magic) and is now known as I-Magic Online.

I-Magic Online calls their games MEGAgames, and their



I-Magic Online’s *Warbirds* may not boast photorealistic graphics, but its smooth frame rate and realistic flight physics are more than enough to create a true “you are there” sensation.

major offering is *Warbirds*, a WWII air combat game with participants from all over the world. Launched commercially on the Internet in December 1995, the game boasts players from as many as 70 countries and combat arenas of up to 200 combatants (“any bigger and it gets too crowded”). “We have players from 70 countries and six continents,” Salinas says. “We have players from Russia, from the Philippines, all over. We’re trying to get the guys in Antarctica going next.” I-Magic Online’s next game, *Planetary*

Raiders, is a space-combat and trading game currently in beta testing; because it will be spread across several servers the 200-player limit won't apply, but the idea remains not to keep any one area too crowded for play.

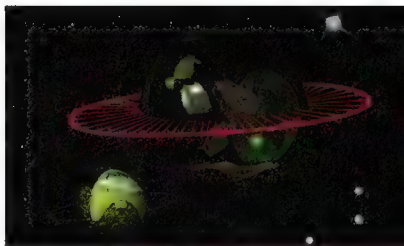
The concept behind *Warbirds* is simple. There are four countries, with players flying from various airfields in those countries. You can fly individually, or as part of a squadron with a separate mission. The goal is to capture the other players' airfields, but the real idea is to get better as a pilot the more you play. "You keep a scoring system on yourself," Salinas explains, "so you can see yourself getting better and better throughout the campaign. I think players have to know how they're doing, and I know a lot of our players love that aspect. One of our players even wrote up a scoring web site."

Web sites based on *Warbirds*, in fact, are all over the Internet. Salinas suggests that as many as 300 sites dedicated to the game have been put up by the players, and that it's the player participation that keeps the game fresh. Players create squadrons, invite other players into them, and come up with different missions on their own. "The whole concept," explains Salinas, "is that you create an environment for people to play in. The design question is, can you leave the game open enough for them to do this?" Apparently so in the case of *Warbirds*, because "players go up and do what they feel like doing."

According to Salinas, the secrets to a successful SMOG lay first in not having only one single path for completing the game, and secondly in making sure outcomes remain unpredictable.

"Competing against real people gives these games their appeal," he says. "In *Red Baron*, for example, the AI would pull an Immelman, then just hang there and let you kill it. But in *Warbirds*, you have no idea what the other guy's going to do. And while you're playing, you're chatting with your squadron members at the same time. There are always real people out there." Most of these people, moreover, are adults, because "at two bucks an hour, there aren't a lot of kids in the game. The maturity level makes the community a little nicer."

So how do you get people coming back to a game that costs two bucks an hour? "Our philosophy is that *Warbirds* and *Planetary Raiders* are built for the Internet," Salinas explains, "not for a box. We have to invest time and make changes every 60-90 days and keep it fresh. We add different scenarios, we add torpedoes, we add Japanese aircraft, we add terrain." And to judge from the results, it works. "We keep these guys for an average of twelve



months. They love it. They're good at the game, they get a name. They're sort of cyberstars."

Origin Systems

When Richard Garriott created *Ultima* back in the computer stone-age (the early '80s), he probably didn't realize that he was setting a phenomenon in motion. The *Ultima* series is the most popular fantasy role-playing series in computer gaming history, and the *Ultima* universe (Britannia) continues to expand. Right now, we're on the verge of quite possibly the most significant event in the history of fantasy role-playing: the appearance of



Hack 'n' slash fans will get a chance to prove their mettle against an impressive bestiary in *Ultima Online*.

Ultima as an Internet game with countless players from all around the real world.

Ultima Online is getting ready to fly, and expectations are heightened because of *Ultima*'s popularity. But it's also that popularity that gives the game an edge over other SMOGs. According to Starr Long, director and associate producer of the game, "We're the only one with a property behind it, the names of Origin and *Ultima*. And the company's motto, 'We Create Worlds,' allows us to create a truly depth-filled environment for the players." In fact, it doesn't just allow them, it forces them. Anything less than brilliance, and deep disappointment is sure to set in.

Long recognizes the importance of the social points of the game, but he also realizes that this is *Ultima*, so the game itself has to work extremely well. "The social aspect is strong," he explains, "but players can get that in a chat room or a bulletin board. What keeps them coming back is the 'sandbox,' the playing environment itself. The sandbox has to be entertaining and dynamic. Every time they come back, something has to be different."

Of course, every SMOG producer knows this, but *Ultima Online* takes a different tack on how to make changes happen. "Some games try to do this by having a full team of people constantly adding new stuff," Long says. "Our main concentration is

on setting up systems that generate that feeling." One such system in the game is called the resource system, which blends ecology and economy. For example, if players decide to get money by killing deer and selling the meat and the hides, they might be unknowingly setting other events in motion. They might discover that a nearby dragon has been depending on deer for food, and now that deer are scarce the dragon will attack the nearest town. In all cases, the idea is for the player to have a true effect on the game universe, with all events interrelated. Because of the game's size, however, it's unlikely that any one

actually design that quest. Instead, we set up a system of world simulation that produced it. We don't script out individual quests; we have an artifact-generation engine. For instance, it generates artifacts all over the world and scatters them, and then it seeds clues to their whereabouts in NPC (non-player character) conversation." With these systems in place, *Ultima Online* doesn't need live game masters to create quests and invite players into them.

And Long insists that the game is wide open. "If you want to take the role of the hero, you can do that. You can go in the dungeons and collect treasure, you can be the highway robber,

you can even be the villain. If you want to, you can be a blacksmith." The reason this works is that the game is skill-based, not experience-based. You can forge armor and sell it, which gets you certain skills, and you build and sell houses. In all, there are about 40 different skills you can learn. But if you want to just socialize, you can "hang out in the taverns and drink virtual ale."

The game has an overriding plot, but as in most *Ultima* games, you won't know what it is when you begin playing. Also typical to *Ultima* games, says Long, "the plot isn't about good and evil. It's more about the gray areas between the two". The game puts people in ethical situations, and the decisions aren't easy.

The game itself is set up as a



Origin's *Ultima Online* could well be the most ambitious online fantasy role-playing game ever created, combining fantasy elements with a realistic game world that's undergoing constant change based on what players are doing.

player will have such an effect; instead, trends produce effects of this sort. "And the world continues when you log off," says Long, "so you might not even know about the effects you've had until you log back on, perhaps several days later."

The generation system also produces the game's quests. "The dragon attacking the city is a quest," says Long, "but we didn't

"multiverse," with each server set linked to all other server sets; each server set can support up to 3,000 players who can all be online at once. "Interestingly," according to Long, "that's not a technological consideration—it's a limitation of the physical space of the virtual world. Put more people in it and suddenly it's Mardi Gras."

▶ Sierra On-Line ◀

Remember the problems consumers have encountered with America Online recently? Well, you're not the only one. Steve Nichols, creator of Sierra On-Line's online fantasy role-playing game *The Realm*, had an even bigger problem. *The Realm* had been in the works for the ImagiNation Network, but when INN decided to close up shop and begin work on its new CyberPark service, Nichols went to AOL. "They were interested," he says, "and gave us some money and had us develop it." But then things started to happen. Or, rather, not happen.

"We were scheduled to launch in mid-November of 1996," Nichols explains, "but right at that time they did their switchover to flat rate. We were supposed to be paid by the hour, a royalty on AOL's hourly fees, but with the flat rate, they no longer wanted to put up games that got an hourly royalty. The game is still in closed beta on the AOL site. They've got us on hold until they can figure out how to make money. The result is that we're no longer

focusing on AOL, but rather on the Internet version. We weren't really pushing our Internet version until all these problems started."

As it now stands, *The Realm* is little more than a graphically souped-up MUD. But, as Nichols explains, "we're planning the project on an evolutionary path, constantly upgrading based on user requests. We're now working on quest engines, the NPC interaction system, and upgrading size of the world to 4,000 rooms or so from its current 1,000. Characters are customized right down to faces, and you have your own house, plus a strong-box, for password-protected item storage. The basic role-playing activity is to join up with 3-4 other people and do quests. Right now, there's no overarching storyline—that'll be added later."

According to Nichols, making friends is a big part of these games. He realizes that, for some, *The Realm* "will become their virtual life." Because players will take out a yearly unlimited-play subscription for \$49.95 (the cost of the CD), he sees some players as being online a great deal, and that social and addiction problems could result. *The Realm* has



The social aspect of teaming up with other players as you move through *The Realm* is appealing, but it also has another benefit: the safety of numbers.

built-in options so you can ignore irritating people (you can do this on Internet chat as well), and for live game masters to put offensive characters in jail, suspend them, or even kick them out completely. But these things, he suggests, tend to be self-policing, just as they are on MUDs, so he doesn't see any significant problems along these lines.

▶ Studio 3DO ◀

If you want to experience a fantasy role-playing SMOG immediately, head for www.meridian.3d0.com and sign in. One really long download later (there's also an option to order a CD containing the game software), and you're into a fantasy world with lots of trimmings.

John Hanke was originally the producer of *Meridian 59*, and is now the marketing manager for 3DO's Internet Division. He won't give out exact numbers





(very few people will in the Internet world), but he says *Meridian 59* has “thousands of customers, and at any given time we have several hundred people online, sometimes more than a thousand.” Okay, good enough. The point is that, unlike *Ultima Online* and other anticipated SMOGs, the game is up and running, and you can jump in and venture forth before you finish reading this article (well, except for the download).

The game has garnered awards and press, even though it's relatively bare-boned in its earliest incarnation. But Hanke says the company will keep the game “fresh and ever changing,” and to that end they've released two updates and an expansion pack called *The Vale of Sorrow*. For the *Sorrow* upgrade (a 16MB download), Studio 3DO offered a CD version for \$4.95 and marketed it as a collectible, with programs developed by *Meridian* players themselves (one keeps a clock on your Win95 desktop showing *Meridian* game time). The next expansion pack is planned for September. “It will be a major upgrade, including a rewrite of several portions of the game, an upgrade to the game's art, an island to explore, and a ton of new quests, monsters, weapons, magic, and so on.”

Designing a game like *Meridian* is much different from designing stand-alone games, Hanke says. “We started experimenting with very large-scale, collaborative team activities, very unstructured but with overall goals.” One approach has been to develop large-scale quests where the idea is for players in the game world to shift the balance of power, ideally by working

together collaboratively. “The first example was a power struggle between a duke and a princess, which was the first baby-step in this kind of game-play. The overall puzzle is to shift the balance of power, and you do that by doing errands in the games and returning objects to various non-player characters, giving them new power. When you shift the power towards the princess, magic becomes easier, because she's on the side of magic. When power shifts to the duke, who's a business guy, doing business becomes easier, with many other results as well. No single player can push the balance together, but collaboratively groups of players can make it happen.” A new power-shifting puzzle appears in *The Vale of Sorrow* expansion pack.

The *Meridian 59* team keeps people interested in more ways than giving them expansion packs and overall puzzles, however. They've developed games within the game, as evidenced by a hugely popular assassin sub-game that's developed a following all its own. You can play chess in the game, or compete at the arena. And there are also contests. “We've had contests for best supporting web site, best role-player, and *Meridian* player of the month,” says Hanke. “We have a staff called the *Meridian* events staff whose full-time job is to think of activities to take place in the *Meridian* world. For example, they did a lottery where you bought a ticket in the world of *Meridian*, and the winners got real prizes such as software, hats, or T-shirts.”

Still, Hanke feels the game is “mostly about social interaction, and we work to encourage that.”

As an example, players started forming guilds early on, so the designers built in a system to support that activity and save players the trouble of keeping track of it all. At \$9.95 for unlimited monthly play, the game is also cheap enough to encourage people to keep coming back, and that, too, promotes social interaction. Hanke says the game has not generated any real social problems because “players do a good job of policing themselves.”

► Where We're Headed... ◀

We live in interesting times. And with SMOGs, the gaming world gets more interesting still. For the first time in the history of computer gaming, it's not only possible for hundreds of players to actively participate in a single game from all over the world, but it's also relatively easy—and with so many compelling games to play, this could become one of the primary ways we meet new friends online.

And it also changes the face of computer gaming. Once seen as a solitary, almost anti-social affair, computer games will now bring people together rather than isolate them—and isn't that the whole point of the Internet? ©

Neil Randall is the author of eight Internet books, including The Soul of the Internet (ITCP) and Special Edition Using Microsoft FrontPage (Que). He has been writing about computer games for over a dozen years, role-playing games for even longer and he even helped design one—James Bond 007.



With the arrival of its revamped Internet Gaming Zone, Microsoft takes a huge—but calculated—step into the world of online multiplayer gaming.

It's been said that patience is a virtue—but it's also been said that he who hesitates is lost. In the case of Microsoft and online multiplayer gaming, though, the former is definitely true.

As newly formed multiplayer gaming services such as TEN and Mplayer worked feverishly to get their networks up and running last year, Microsoft almost seemed to be standing on the sidelines, watching the action but showing no sign that it was truly serious about online multiplayer gaming.

But appearances can be deceiving. Microsoft might not have been making the same kind of noise as major players like TEN, Mplayer, the ImagiNation Network, but in fact the software giant had been quietly busy for

some time developing its own multiplayer gaming service.

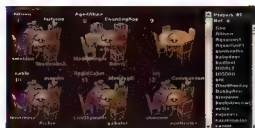
"Microsoft's investment in Internet gaming began in 1995, when we were working on a number of new multiplayer technologies in an internal project called 'Arena,'" says Steve Murch, product unit manager for Microsoft's Internet Gaming Zone. "We had messaging, matchmaking, chat, and more in the Arena design, and it was all Internet-based."

Microsoft's Arena never made it to the Net, though; instead, Microsoft purchased an existing Internet multiplayer game site called the Internet Gaming Zone from Electric Gravity in May 1996. "About the same time we finished the initial Arena

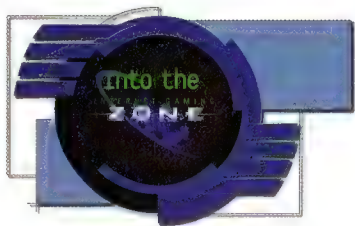
prototype, we ran into the founder/developers of the Internet Gaming Zone at Electric Gravity, Murch says. "We shared our mutual visions and found out we had a lot in common." When Microsoft purchased the Internet Gaming Zone, or IGZ for

short, the service had been serving customers for only slightly over half a year; the only games offered were classic board and card games such as chess, checkers, hearts, go, and spades.

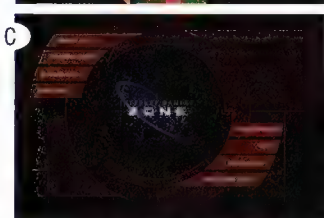
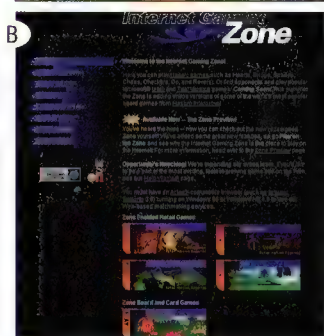
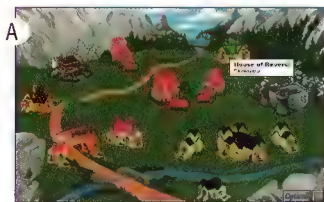
Even after the acquisition of the IGZ, though, Microsoft



Lobbies for classic games such as spades, hearts, and backgammon are always busy on the Zone because they provide newcomers with games they already know how to play. The social aspect of these games also gives them a lot of appeal for players interested in meeting friends rather than destroying enemies.



old vs. new



When ZoneMatch was first added to the Internet Gaming Zone, members had to use a Web browser to play retail games online (A) and separate retail software to play Zone's classic board and card games (B). The new Zone, on the other hand, allows players to access every Zone game and activity from a single, Web-based interface (C).

seemed to still be treading in the shadows of the online multiplayer gaming industry. As higher-profile multiplayer services ramped up for their respective launches with ad campaigns and heavy media hype, Microsoft quietly worked on adding new features to the Internet Gaming Zone.

By the end of last year, a matchmaking service was in place that allowed owners of the retail versions of *Close Combat*, *Monster Truck Madness*, and *Hellbender* (or the trial demos of *Monster Truck Madness* and *Hellbender*) to meet at the IGZ and set up games over the Internet with a few simple mouse clicks.

The Internet Gaming Zone still lacked many of the bells and whistles of networks like TEN and Mplayer, and it certainly didn't support as many games—but by implementing a matchmaking service, it was offering essentially the same service as those companies. And Microsoft wasn't charging one red cent for doing it, either—a fact which undoubtedly contributed to the rise in Zone membership from 15,000 at the time of the purchase to 120,000 by year's end.

For its patience, Microsoft reaped two rewards: It allowed its competitors to shoulder the early advertising costs of "spreading the gospel" about online multiplayer gaming (at a time when it was unlikely that positive cash flow could be generated by membership fees alone), and it was able to learn from the mistakes—and the successes—of those competitors.

Finally, in March of this year, Microsoft unveiled its vision of the future of online multiplayer gaming with the preview release of its revamped Internet Gaming Zone. Nearly every aspect of the

new Internet Gaming Zone reveals the foresight and planning that went into its development. A quick rundown of all the features planned for the new Zone—some already in place in the Preview version—makes it clear that Microsoft not only wants to enter the online multiplayer gaming market in a big way, but also create the definitive paradigm for multiplayer gaming. Considering just how much is being offered at no charge, that would be just fine with many gamers.

The redesigned Zone offers members a variety of services: free software and matchmaking services for classic board and card games; ZoneMatch lobbies where owners of both Microsoft and third-party retail games can chat and set up multiplayer games at no cost; and ZoneLAN, a matchmaking service that allows DOS-based IPX-compatible games to be played on the Zone free of charge. Its exclusive "made-for-the-medium" games designed specifically for Internet play on the Zone feature innovative and affordable pricing structures; organized tournaments for board and card games (as well as games supported in ZoneMatch), easy access to DWANGO (Dial-Up Wide Area Gaming Operation) and offer extremely low latency for "twitch" games such as *Doom*, *Hexen*, *Mech Warrior 2*, and many others.

guiding principles

Even with only a quick glance at the Zone's design elements, Microsoft's guiding principles in the creation of the Zone become crystal clear. The first is obvious: If you can do it on the Net for free, you can do it on the Zone



Check the latency indicator at the right of the screen in each ZoneMatch lobby to see what type of game play you can expect in matches with particular players. Green means you're very close to the player in cyberspace; red means you probably shouldn't get into a game with that player because there'll be too much lag.

for free, too. While it's true that other services provide free matchmaking for owners of retail games—Mplayer springs immediately to mind—none currently offers the bevy of freebies that can be found on the Internet Gaming Zone. So why is Microsoft offering so many services to Zone members free of charge?

"We really believe that people shouldn't have to pay multiple times, or be a computer engineer, just to have fun with other people on the Internet," Murch says. "After all, people can do a lot of fun things on the Internet for no additional charge, and you can also play multiplayer games via other means [e.g., straight dial-up or a local area network] without paying an additional fee. Therefore, if we want the Zone to be the largest, most active gaming community on the Internet—and we do—we believe it's really wise to provide a large base of classic games and matchmaking services at no extra charge."

In the preview version of the Zone, Microsoft has already addressed some of the problems in the design of the old Zone. In its original incarnation, users had to load special front-end software

to play the board and card games, then switch to a Web browser to access the ZoneMatch lobbies. Now, access to all games is handled solely through a Web browser (currently, only Internet Explorer is supported), which should encourage longer online sessions. Gamers who want a break from the intensity of a *Monster Truck Madness* or *Close Combat* can opt for the more sociable atmosphere of a game of chess or checkers.

Another addition is a "latency indicator" for each member in a ZoneMatch or ZoneLAN lobby. It displays the latency between you and all your potential opponents. This is crucial, since it's the latency between the participants that determines how smoothly a game plays, rather than each player's latency to the Zone.

"A user-to-user latency meter is much more accurate than any user-to-server measure," says Murch. "It provides a good estimate for the kind of latency you should expect with your opponent."

Microsoft's games lineup for 1997 is impressive: At least six A-level retail games are scheduled for release between now and the Christmas holidays, covering nearly every genre of multiplayer gaming (see sidebar). That's just the beginning, though. Microsoft has already announced agreements with Hasbro Interactive and LucasArts to provide ZoneMatch support for their games.

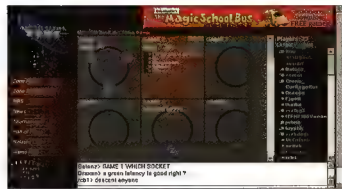
By summer, Hasbro will have

added multimedia versions of four classic board games—Monopoly, Risk, Scrabble, and Battleship—to the ZoneMatch roster. Microsoft had matchmaking support in place for LucasArts' *Outlaws* as soon as the game hit shelves. *X-Wing vs. TIE Fighter*, *Jedi Knight: Dark Forces II*, and *Star Wars Rebellion* are also headed for the Zone in coming months. It's a sure bet that other third-party publishers will create Zone-enabled versions of their games as well.

day tripper

As important as ZoneMatch (the Zone's multiplayer matching feature) is to the Zone's success, the bottom line is that the ability to play retail games over the Internet for free will never be unique to the Zone. That's where the concept of "made-for-the-medium" games—those that can be played only online over the Zone—comes into play. It's the third principle that Microsoft has used in shaping the new Zone: develop high-quality, made-for-the-medium content, with a pricing plan that encourages activity rather than clock-watching.

As Murch points out, "There are so many great things the Internet can add to game play right now. One aspect is persis-



ZoneLAN allows owners of DOS-based games with IPX-network support such as *Duke Nukem 3D* to play each other over the Internet free of charge.



tence. Through game servers you can keep track of history—like storyline or a win/loss record—or even highlights from previous games. There's also the appeal of a shared experience. By networking on a massive scale, you can bring hundreds, if not thousands, of players together. This is important because the social dynamics of two people in a room or game are dramatically different from a group of 20, 100, or 1,000."

Microsoft's first made-for-the-medium game is *Fighter Ace*, a WWII air-combat simulation featuring 12 planes, multiple game play options (like free-for-alls, team play, and private games), arenas based on skill level, and the ability to support more than 100 combatants in a single arena. We had a chance to try our hands at

Microsoft Games '97 moving into the big leagues

Offering a service such as ZoneMatch free of charge to Zone members is certainly appreciated by all multiplayer fans, but it's nothing without a wide variety of games to play there. Fortunately, every upcoming game from Microsoft that has multiplayer options—and nearly all of them do—will be supported on ZoneMatch. Here's what you can expect to see people playing on the Zone over the next six months.

Fighter Ace, and it looks to be a winner—both graphically and in the game play department. And has to be, given the loyal fan base of the other major air-combat sims online—*Air Warrior*, *Air Warrior II*, and *Warbirds*.

"The most apparent difference between *Fighter Ace* and its competitors is its intense and realistic graphics," says Michelle Greene, director of marketing for *Fighter Ace* developer VR-1. "*Fighter Ace* uses MM3D, VR-1's proprietary real-time rendering engine to create its impressive terrain, flight models, texture mapping, hazing, and more."

One look at the screen shot makes it plain that Greene isn't talking turkey—there's no question that *Fighter Ace* has the best graphics of any online multiplayer air-combat game. Another key component of *Fighter Ace*, Greene says, is that "it's simple enough for even novice pilots to jump on and start playing and continuously challenging for experienced players."

Microsoft will, of course, charge for Zone members to play made-for-the-medium games such as *Fighter Ace*—pretty standard procedure for online-only gaming content. But what makes the Zone unique among present pricing models is the way Microsoft will charge users for *Fighter Ace* and other online-only games: Zone members will pay flat rates for unlimited play, either for a day or a month of game time. The reasoning behind the rate plan, Murch says, is simple. "We don't want players to have to mentally watch the clock. If you've been in a taxi, you know the feeling. You're not thinking about getting to the airport or seeing the city—you're thinking about that meter ticking away. Conversely, if you've paid a flat fee, it's likely that you're much more relaxed and focused on other things."

"Many entertainment experiences—like movies, cable TV, and others—charge a flat fee. Do you buy a movie ticket by the hour? Nope. For us, the daily/monthly model is pragmatic, simple, easy to communicate and, most importantly, allows people to concentrate on the game, not the clock."

Age of Empires

Here's our "instant classic" candidate. There are plenty of real-time strategy games poised to hit the market this year, but *Age of Empires* is unlike any of them. Your goal is to build a small ice-age tribe into a great civilization over the course of 10,000 years. Players can opt for either military or economic strategies to guide their people to world dominance, giving the game a broad-based appeal. And the graphics are a true wonder to behold. Scheduled for release in late summer or fall of 1997.

C.A.R.T. Precision Racing

This one wasn't very far along in development when we saw it in March, but what was in place looked impressive. Using a totally physics-based model, *C.A.R.T. Precision Racing* promises to deliver the same white-knuckled excitement of actual C.A.R.T. racing through silky-smooth animation and a very high attention to detail. Should be ready in time for the holidays.

Close Combat 2

Close Combat was a great wargame, but *CC2: A Bridge Too Far* improves upon its award-winning predecessor in a variety of ways, many of which resulted from direct requests by *Close Combat* fans. Playing as either Axis or Allies, *A Bridge Too Far* lets you relive Operation Market Garden, one of the most intriguing battles of World War II. New features in *CC2* include indirect artillery fire; the ability to use elevation to target enemies; a resource-allocation model that allows you to determine which troops will fight where; and a campaign mode that requires you to manage battles on four simultaneous fronts. Due out this fall.



Microsoft's first "made-for-the-medium" game—in other words a game that can be played only online at the Zone—is *Fighter Ace*, from VR-1. Superb terrain graphics put *Fighter Ace* at the head of the multiplayer dogfighting class in the visual department, but how well it actually plays over the Internet has yet to be seen.

And, according to our research, it's also far and away the choice for consumers."

MAN: The social animal

When most people think of online multiplayer gaming, they naturally focus on the games themselves. But there's another element that's just as enticing—the social nature of the experience. Particularly in classic games such as checkers, backgammon, hearts, or chess, people often flock to the Zone as much to chat as to play. Microsoft realizes this, so another of its guiding principles is to make the Zone a


great place not only to play against people, but also to get to know them.

One way of finding your friends on the Zone is to use ZoneMessage, which allows you to send greetings to any player logged onto the Zone regardless of what game he or she is playing. The Zone BBS (actually a collection of newsgroups) provides a "bulletin board" where users can share experiences, provide tips, and exchange other information; organized tournaments will further contribute to the sense of community.

Finally, Microsoft is busy working on creating a feature that will allow users to create "avatars"—graphical representations of their online personas—that make the entire experience even more people-oriented.

Truly to succeed, online gaming networks must attract newcomers—and Murch feels the redesign of the Zone does just that. "We think the Zone's web integration makes it super-easy for players to get started," he notes. "If you can use a browser, you can find a player and play a game. It helps that new players

will find games like backgammon, checkers, and chess, and most of them know how to play the Hasbro titles that will be supported this summer."

Some might dismiss Microsoft's Internet Gaming Zone as a Johnny-come-lately-attempt to cash in on the burgeoning multiplayer gaming industry. But if you talk to anyone who's working on the Zone, it's obvious that these folks are doing it because it's something they love and believe in. And if the Zone carries the stamp of their convictions, its success is virtually guaranteed. 



To expand the number of games supported in ZoneMatch, Microsoft signed agreements with Hasbro Interactive and LucasArts to provide Zone support for their upcoming multiplayer titles. By the time *Outlaws* actually shipped, in fact, ZoneMatch support for the game was already in place.

► Critical Depth

It might bring back memories of the lackluster *Deadly Tide*, but *Critical Depth* has about a million times more replay value than that linear game. After choosing and outfitting a combat sub, players battle head-to-head as they try to be the first to locate beacons that have appeared mysteriously in the ocean. And they don't call it *Critical Depth* for nothin'. Take your sub too deep and it implodes from the pressure.

► Microsoft Baseball 3D

Like *C.A.R.T.*, *Baseball 3D* was still in the early stages of development when we saw it. But what we did see looked awesome. The 3D-modeled players were stunningly lifelike, and the 3D environment allows for complete freedom of movement and unlimited camera angles. With over 500 motion-captured moves, realistic ball physics, full MLB and MLBPA licenses, 3D ambient sounds such as vendors and announcers, and enough stat categories to make Joe Torre's head spin, *Baseball 3D* could well be a hardball fan's dream come true. Slated to ship this fall.

► The Condemned

This one takes the idea of game shows into a deadly new realm. Set far into the future, *The Condemned* revolves around a TV show which pits convicts from an off-world prison in a battle to the death in which the winner receives "freedom points." Win enough battles, you earn your freedom. The emphasis is definitely on firepower and action in *The Condemned*, but vehicle customization options and an amazing array of weapons give it a nice strategic element, too. Look for it in the fall or winter of this year.

Sega Takes Console Gamers Online

Online multiplayer gaming has been almost exclusively aimed at PC owners in the past, but as new technologies are developed, fans of console video games will join the ranks of online enthusiasts. VideoNet tracks the latest news in this emerging area of online gaming.

Online gaming has never mixed well with video game consoles, but it's certainly not for lack of trying. Before Ralph Baer sold what would eventually become the Odyssey video game system to Magnavox, he first tried to market the device to cable companies as a way they could offer head-to-head video gaming as an additional cable service. And in 1983, Coleco and AT&T set up a joint technology partnership in which it would work with video game expert Coleco to create a way for people to play games with opponents throughout the United States.

The venture boiled down to little more than a modem cartridge for Colecovision, and the partnership fell apart within a few months. Shortly after that, the entire video game industry collapsed.

But the concept of a video game modem came to fruition during the 16-bit generation with the arrival of Catapult Technologies' X-Band service. By attaching a specially designed modem to Super Nintendo and Sega Genesis systems, users can connect to the X-Band service, which attempts to "match-make" a game against an opponent within both players' local calling areas (users can also opt to be paired with opponents outside their local calling area).

Once a match has been made, both players are disconnected from X-Band and one modem dials the other to establish a direct modem-to-modem connection for gameplay. Even though Catapult launched X-Band during a year when consumers were losing interest in 16-bit game technology, the service helped introduce many video game players to the excitement of head-to-head gaming.

Of the three major manufacturers of video game consoles on the market today, only Sega has had the nerve to venture into the mostly uncharted waters of online console gaming. In the fourth quarter of 1996 Sega released the NetLink, a 28.8kbps modem that enables the



Keep current on NetLink news at www.sega.com. The TV screen image can be viewed here as a NetLink "screen test."

32-bit Sega Saturn to access the Internet. Unfortunately, Sega did very little to support the NetLink after its release. Without proprietary software support and active game sites, NetLink quickly became little more than an interesting device for browsing the Web.

On May 6, Sega finally addressed the real shortcomings of NetLink. They announced that new NetLink-compatible versions of two existing Saturn games—*Sega Rally* and *Virtual On*—will be re-released on June 6, and that NetLink-compatible versions of *Saturn*

network service. Our view is that if it helps create a better experience for the consumer, hopefully we will sell more software units. It may also provide some additional hardware value that may help the consumer decide to purchase a Saturn and a NetLink.”

Of course, the fact that gamers who buy the NetLink-compatible versions of the four titles aren't paying for network compatibility or network service is small consolation for the owners of those games who'll have to buy a second copy to play online—and Sega is well aware of

it. No final decision has been made, but Sega spokesman Dan Stevens says that the company is looking into ways to ensure that users who already own those games won't have to pay “a heck

Of the three major manufacturers of video game consoles on the market today, **only one has had the nerve** to venture into the mostly uncharted waters of online console gaming.

Bomberman and *Daytona Championship Edition* will be available later in the summer.

Why such a long delay between the release of the NetLink and the arrival of NetLink-compatible games? According to Kerry Bradford, general manager of Sega On-line, part of the reason was the time needed to convert top games for NetLink use. “We wanted to make this thing work effectively,” says Bradford. “It takes about a month or two to convert a title to NetLink-compatibility. The communications libraries didn't exist. We had to create those from scratch and that took a little more time than we originally expected. Syncing up games with the APIs (application program interface) also took longer than we'd anticipated.”

And what of the Sega loyalists who already bought *Virtual On* or any of the other upcoming conversions? Will they have to pay for the games a second time in order to play them online? “You will have to have the game discs with NetLink compatibility,” says Bradford. “But it's pretty unique in this kind of industry that we're not asking for any additional charges for the network compatibility and the

of a lot of money” to play online.

As far as the gaming experience offered by NetLink goes, it should be the best online gaming experience ever offered to console fans. At 28.8kbps, NetLink is the fastest video game modem ever offered, and the first crop of games offers compelling multiplayer action. Sega has even created special online lobbies for each game in which players can chat and challenge each other.

The final question, of course, is whether NetLink will develop enough of a following to be viable. So far Sega has only sold 15,000 NetLinks—not a very large universe of potential opponents. Unless the population of NetLink-owning Americans picks up, Sega may be forced to abandon their plans to go online.

That would be a genuine shame. Skimpy as this latest effort is compared to what's available for PC owners, Saturn NetLink is currently the only game in town for console video game fans who want to play online.

Steven L. Kent covers electronic gaming for MSNBC, the *Los Angeles Times Syndicate*, and *react Magazine*.

True or False? 56.6 Is Always Faster.

The technologies behind online multiplayer gaming can be confusing even for experienced computer users. That's why Gary Meredith is here each issue with eLink: to blow away the smoke, knock down the mirrors, and give you the answers on how to reach online gaming nirvana. And you don't have to be an ECPI graduate to understand it, either.

We can't help it, you know. There's just something in the human psyche that makes us want to go a little faster—and that applies to computer users as much as anyone else. We're all familiar with the quest for faster microprocessors: a lot of you have probably bought new systems in the past, only to hear of a new chipset that made your "fast" system look like a Model T.

Microprocessor speed is naturally a hot topic for computer users, especially among gamers, because developers of PC games tend to push the technological envelope as much as possible. But because one focus of personal computing is currently aimed squarely at the Internet, the latest and greatest need for speed concerns modems. And this focus produces some interesting—and potentially confusing—questions.

How Fast Is Fast?

Before we go any further, we need to differentiate between speed and bandwidth:

the two are very closely related, but not identical. In terms of your Internet connection, "speed" translates into "latency"—how long it takes data from your PC to reach the place you want it to go. A 33.6kbps modem, for example, won't necessarily get your signal to Web Site X any faster than a 14.4kbps or even 9600kbps modem.

But that speed is greatly affected by how *much* data you're trying to send and receive—and that's where bandwidth comes into the picture. Bandwidth is how much data can be sent or received at any given time: the greater the bandwidth, the faster you can do stuff like load graphics-heavy Web pages or download files from an FTP site. To that extent, a high-bandwidth modem is "faster" than a low-bandwidth modem because it won't take as long to retrieve or send big clumps of data—not because your signal's reaching its destination more quickly, but because *more* of it is transmitted every second.

Think of it like this: If you were relocating from New York to Cleveland and you had the choice of using a Pinto or a conversion van, you'd opt for the conversion van—not because the travel time would be less in the conversion van, but because you'd make fewer trips in the conversion van to get all your stuff moved. Of course, if each load was limited to a small size—i.e., small packets of data—and the Pinto could move those small loads faster, you'd go with the Pinto (the lower-bandwidth modem). But for the most part, higher-bandwidth modems—28.8kbps

or 33.6kbps—can generally be considered “faster” than lower-bandwidth modems, and for our purposes, we’ll judge a modem’s speed by its bandwidth.

High-speed Internet connections are nothing new. The Integrated Services Digital Network (ISDN), for instance, has been around for over a decade. It’s a system of digital phone connections (as opposed to analog connections, which are more than adequate for regular phone calls) that offers users bandwidths between 64kbps and 128kbps—a massive improvement over 28.8kbps or 33.6kbps. But ISDN remains—and probably will remain—out of reach for most Internet subscribers, mainly because of special equipment that’s required, steep costs—initial setup costs in our area run around \$350 or more, with monthly fees from \$115 and up.

You won’t hear this in the advertising of 56.6kbps...but the **higher speeds** each promises **are limited** to connections between the user and the ISP.

Asymmetric Digital Subscriber Line, or ADSL, promises to deliver data transmission rates ranging from 32kbps to 8.192Mbps (megabits per second)—coming from the Net to your PC (downstream)—and 32 kbps to 1.088Mbps from your PC to the Internet (upstream). The advantage of ADSL is that it’ll work over regular phone lines (unlike ISDN). Because ADSL operates at frequencies far above those used by conventional modems and voice lines you’ll be able to fax or make phone calls on the same phone line—even while connected to the Internet. But because ADSL requires you to be within close proximity of your telephone service (currently around three miles from the service or from an “amplifier” to boost your signal) and requires special equipment on both the user and phone company’s end, it’s unlikely that it will have any effect on most Internet users for quite some time. That leaves the new 56.6kbps modems, which

“promise” speeds close to ISDN over regular phone lines.

Promises, Promises

While modem speeds may be exciting from a technical standpoint, extra speed also has the practical advantage of saving time. For gamers, it’s only logical to expect that a faster modem will result in smoother, more immediate game play—but is that *really* the case? And more to the point, will buying one of the new 56.6kbps modems take your game playing up to network-level speed?

The most important thing you should know is that there are actually two competing technologies for the new 56.6kbps modems: the x2 from U.S. Robotics and Lucent/Rockwell’s

K56Flex. As luck (and the idiosyncrasies of the marketplace) would have it, they’re incompatible with each other, even though both will communicate perfectly well with the older v.34 modems.

If you’re thinking we’re about to experience one of those slow, lingering shakeout battles such as the infamous VHS vs. Beta videotape wars of the early ‘80s, or even the more drawn-out and ongoing struggle between Intel and Apple computer platforms, think again. Things happen pretty quickly in the world of Internet technology, and while it still may be early 1998 before a single standard for 56.6kbps modems prevails, that still means we’ll reach a standard much sooner than we did with those other technologies.

Because Internet Service Providers (ISPs) simply can’t afford to equip their modem banks with two competing types of modems, some sort of interoperability (the modem manufacturers’ phrase, not mine) between the two is a virtual certainty. While Lucent/Rockwell presently controls a majority of the ISP equipment market, U.S. Robotics has something of a corner on the retail end-user market. Clearly the immov-

able object meeting the irresistible force analogy is at work here. How will it play out? We suspect there'll be some compromise between the two combatants most likely arranged by the International Telecommunications Union—though whether that would mean the present technologies will be upgradeable to the eventual standard remains a big question mark.







Both systems achieve their higher transmission speeds in the same way—by circumventing the usual way modems do their business. In a typical v.34 modem (33.6kbps and slower), the outgoing data from your computer is first converted from digital form to analog, in the form of modulated tones—modem music, if you will. When these tones reach the target modem, usually at your ISP, they're coded back into digital data. When you're connecting to a third party, such as a Web site or another gamer, then this process happens twice because the data being sent from your ISP to its destination must be

converted from digital to analog as it leaves the ISP, and then reconverted once it reaches its target. There's a lot of noise on all these data lines (see below) which effectively limits the speed at which data can travel to about 35kbps.

56.6kbps modems eliminate one part of this process by leaving the data stream coming to you in its original digital form, allowing the use of much cleaner digital phone lines, plus eliminating the need for time-consuming conversion.

Notice I said "the data stream coming to you." It's a very telling point, because it means that your outgoing data, such as your response to a cast spell or a flanking maneuver, still travels the old v.34 path. If your main interest in the Internet is downloading data, then under ideal conditions the 56.6kbps modems will make your life a happier proposition. But online gaming is a two-way street, with upstream transmission every bit as important as downstream reception, so the speed advantages of the newer

Still want to ride technology's cutting edge? If so, here are a few of the K56.6 modems now available:

Manufacturer	Model	Chipset	Type
Boca	 The Retail Shelf 56K Fax Modem	K56Flex	Internal/External
Cardinal Connecta	 56K Fax Modem	K56Flex	Internal/External
Diamond	 SupraExpress 56 Series	K56Flex	Internal/External
Hayes	 Accura/Optima 56K Fax Modem	K56Flex	Internal/External
Practical Peripherals	 Practical 56K Fax Modem	K56Flex and x2	Internal/External
U.S. Robotics	 Sportster / Courier V 56K Fax Modem	x2	Internal/External

modems are not nearly so dramatic. Certainly you'll see somewhat lower latency in your gaming because the data experiences the analog/digital conversion only twice between you and your partner, rather than the usual four or more times. If that were the only consideration, then there would certainly be justification for buying a 56.6kbps modem. Unfortunately, that's not the whole story.

First of all, the above phrase "ideal conditions" needs explaining. Most of us don't experience ideal conditions with our modem connections, mainly because of the limitations of our phone system, the ubiquitous POTS (Plain Old Telephone Service). The limited frequency response of the old twisted-pair lines makes it easier for noise to be introduced into the equation, as do the various of installation problems we all suffer through: did the installer tighten all the connections properly, or is your installation perhaps a do-it-yourself masterpiece, or an old

system with creeping corrosion? All those variables add to the noise, as does the quality and the length of the line from your modem to the outlet. Beyond that, your telephone company's own central switching system sludges up the line a bit, too. You might be one of the lucky few whose phone company has switched to fiber-optic lines, but those systems are still few and far between.

Then there's a little jewel known as Shannon's Law, first postulated in 1948 by Claude Shannon, to calculate the maximum transmission rate through a specific medium. In our case, the rate through copper phone wires is something on the order of 35kbps (factoring in the digital-to-analog/analog-to-digital process between you and your ISP). The 56.6kbps modems get around Shannon's Law by eliminating half that process, but you're still left with copper phone lines that will only allow a certain amount of data to flow through them only under perfect conditions. Though you won't

Bundled Software	Price	Phone Number	Company Website
QuickLink Message Center/Complete Internet Suite (Eudora Lite, McAfee WebScan, Surfwatch, VocalTec and more), TEN Gaming Software, SVD Gaming Software	\$149-169	561-241-8088	www.bocaresearch.com
Internet Solutions CD-ROM (browser, email, newsreader, FTP, Telnet) Kinderguard parental control software, Televox I-phone app., Anyware AntiVirus	\$159-219	717-293-3000	www.cardtech.com
FaxTalk Messenger, NetCom, VDOPhone, VDOLive, Microsoft Internet Explorer, COMit	\$169.95-\$189.95	360-604-1400	www.diamondmm.com
Complete Communications Suite (fax, email, voice mail, internet connection)	\$179-\$239	404-441-1213	www.hayes.com
Practical Message Center, fax, email, voicemail, caller ID	\$195-199	773-840-9966	www.practicalnet.com
U.S. Robotics Connections (fax, email, voicemail, Internet Access, communications utilities)	\$225-\$275	800-525-8771	www.usr.com

hear much about this in the advertising of either of the 56.6kbps technologies, the higher speeds each promises are limited to connections between the user and the ISP. If you have a 56.6kbps modem, for example, and want to connect directly with someone using the same type of modem, you'll both be limited to v.34 speeds for both transmission and reception—back to around 33.kbps, in other words.

Then too, if you're going through an older phone system, you may not see any increase in speed because the 56.6kbps mode will not work going through systems where there's an additional digital-to-analog conversion, as is necessary for some older systems to connect to the multiplexed lines used by newer phone systems. As with a noisy line, the 56.6kbps modem will simply switch down to v.34 mode and you're essentially getting the performance of a modem costing a third the price you paid for your little 56.6kbps wonder.

Given the vagaries of phone lines, even the 56.6kbps modems can manage only about 45kbps, on average, with a good solid connection (although Shannon's Law would indicate possible speeds as high as 64kbps). That's a peak speed, by the way, because like other modems the 56.6kbps models adjust their speeds as line conditions change during a session. Granted, that's still better than what you're getting now, and even that might make buying one of these modems a smart move—but we've got one more industrial-strength monkey wrench to throw into the mix.

As much of an improvement as the modems may be under special circumstances, the fact remains that your ISP must support them. While the number of supporting providers is growing rapidly, you should investigate whether *your* ISP supports x2, K56Flex, both...or neither. (U.S. Robotics maintains a list of supporting ISPs at www.usr.com.) Many gamers still go through smaller ISPs who may be slower to spend the money to convert. Given the uncertain nature of the battle between the competing technologies, it's estimated that it could be spring of 1998 before there's enough support from ISPs to justify using a 56.6kbps modem. And that assumes a fairly quick resolution to the incompatibility

issue. Besides, who can say that when the dust does settle that either of the modem technologies, as they exist now, will be compatible with the standard that's finally arrived at? Certainly there's hope to believe that any problems in that area can be fixed by a software upgrade, but even that's not definite at this point.

So what does this mean for the online gamer? Well, if you've read Stephen Poole's article in this issue on the basics of getting connected, you already know that pure speed (i.e. bandwidth) isn't everything, and with some games it can even be a liability. But by bypassing part of the analog/digital conversion process that introduces latency into the equation, the 56.6kbps modems do promise a noticeable improvement in gameplay. If that were the only factor to consider, then buying a 56.6kbps modem now would be a prudent purchase. But the nebulous nature of the standards battle—coupled with the lack of widespread support for either technology and the overall slowing down of the Internet due to heavier traffic—would seem to negate some of the advantages of this nascent and still-developing technology. (You might also take into account the performance promises made for 28.8/33.6 modems, and how short they've fallen of buyer expectations.)

If you're familiar with both your local phone system and your ISP, and feel confident that both are sophisticated enough to support the 56.6kbps technology, then buying one of the new modems now makes sense. Your existing modem may be upgradable, depending on both model and build-version. Upgrade policies and practices will vary. At press time, USR, for example, is charging \$99.00. Check your manufacturer's web site for latest pricing and availability...but prepare yourself for getting speeds lower than advertised, and possibly for coughing up the money for either another upgrade or a new modem in about a year's time. And remember—if your phone company's equipment is not up to snuff, it won't matter whether your ISP supports 56.6kbps or not. In that case, you're better off waiting until a stable 56K standard is established and your phone company upgrades its equipment.

TV Guide Gets into the Act

Two News Corp. Subsidiaries Join Forces on Online Game Site: TV Guide's Gamespot Targets Consumer Market with Kesmai

Mainstream audiences are now being targeted by TVGEN, an online multiplayer game center operated by online game giant Kesmai Corp. and TV Guide.

"Kesmai was trying to segue into the consumer market," says TVGEN publicity manager Laura Sigman, "and it was helpful that we were both News Corp. companies. It's a logical first step and a good example of how

two different properties can come together."

Thousands of gamers got a free look at TVGEN with a 10-day free trial in April, playing games ranging from *BattleTech: Solaris* to *Air Warrior II Online*, entering sweepstakes, and chatting with developers and celebrities.

"We've gotten a very positive response," Sigman says. "It's the beginning of what you could call a 'mall

scenario.' TVGEN is the mall, and Kesmai is the first company to set up shop in it. We want to tie in special events—there's a large sci-fi area on our site, so something like a 'Team Star Trek' would be great. We might have a celebrity soap-opera star head a card team. We're leveraging what TV Guide has with what Kesmai offers for a unique online gaming package." Membership in TVGEN



www.tvguide.com/gamespot

is \$4.95 for four hours a month and \$.03 for each additional minute. ©

More Games, Cheaper

And you thought long-distance rates were confusing.

The same type of "survival-of-the-cheapest" attitude is taking over online gaming, with rates falling and the number of available games increasing. Fortunately, the gamer is the winner.

Currently, almost 7 million people use the Internet to play or download games, but it is estimated that only 600,000 gamers compete with other players online.

However, it now looks like online gaming sites will increasingly provide free gaming, adding or increasing advertising to take up the revenue slack. For example, Microsoft's free Internet Gaming Zone was launched in March; (also see Segasoft's Heat.net elsewhere in eNews). As a result, several online gaming sites (such as Mpath) are eliminating monthly fees and trying to increase the number of exclusive games. ©

Block Party Ahead:

Tetris to Reach Online Audience

Say you're hooked on *Doom*? Can't start or finish your day without an online dogfight? Well, you ain't seen nothin' yet...until you grapple with one of the most addictive games ever created—*Tetris*. A lot of today's game players haven't experienced the *Tetris* phenomenon, whereby rational people are reduced to quivering button-pushers physically unable to resist playing "just one more round" of a deceptively simple puzzle game. The

past decade has seen dozens of versions and adaptations of this falling-block puzzle—which has sold 40 million copies worldwide—but it hasn't been available online. Until now.

The ImagiNation Network has received exclusive global rights to online, multiplayer *Tetris*.

"It's such a popular game that it's right in line with our commitment to providing the most compelling content for a broad audience appeal," says Valerie

Carlson of the ImagiNation Network.

"We're in the process of putting together tournaments and contests on a really large scale." Although few would dispute *Tetris*'s status, it remains to be seen how the game, usually played by one person at a time, can or will be enjoyed by multiple players.

Multiplayer *Tetris*, developed by Blue Planet Software, will debut on America Online and ImagiNation's other ISPs later this year. ©



lock. Then it's bye-bye until tomorrow. When I crush them in my monster truck.

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X-WING® VS. TIE FIGHTER®

Fighter Ace®

I play:



W W W . Z O

Backgammon

Close Combat

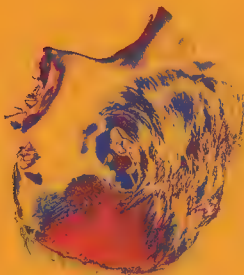
Three clicks and I'm in pulling a real-time eyeball busting turn spraying laser

Microsoft®

WHERE DO
YOU
WANT TO GO TODAY?

I go to see my friends. In the targeting sight. I see them long enough to get a

N E . C O M



I play:

X-WING® VS. THE FIGHTER®

Monster Truck Madness™

Microsoft® Golf

Scrabble®

blasts like spit because I like to go all out on everything. Except my wallet.



S I T E W A T C H

How Fast Is Fast Enough?

Microsoft partners with DWANGO to offer low-latency gameplay—but not on the Net


The problem of how to deal with high latencies on the Internet is foremost in the minds of nearly everyone involved in the creation and online delivery of fast-action games. Recently, Microsoft announced part of its solution: a partnership that would allow members of its Internet Gaming Zone simplified access to DWANGO, a collection of game servers located in 24 U.S. cities that users must dial into directly. DWANGO's biggest advantage over Internet-based game networks is that because users connect directly to a DWANGO server, the data sent between the players in a game doesn't have to cross routers and backbones, thus reducing latency to a minimum.

"We're extremely excited to be partnering with Microsoft to bring high-speed, low-latency gameplay to the Zone," said Robert Huntley, the President and CEO of DWANGO. At a recent Microsoft press event, Huntley explained that Zone members who have submitted billing information to Microsoft will be able to choose an option that disconnects their existing TCP/IP connection and automatically dials and connects to the nearest DWANGO server. Charges for time spent on DWANGO be automatically billed to the user's Internet Gaming Zone account.

Just how well the system will work, however, depends on the resolution of several key issues. While gameplay

on a DWANGO server has proven to be smooth, a limited number of DWANGO servers (24 in the U.S. at press time) means a vast majority of users would have to pay for a toll call to connect to a server. Microsoft and DWANGO say they plan to add 50 new servers by the end of the year, but even with 70-plus servers many users would have to pay long-distance rates to access DWANGO.

Additionally, Microsoft and DWANGO have yet to announce billing rates for DWANGO access through the Zone. But because DWANGO currently supports only retail CD-ROM games (and some shareware versions of those games), the ques-

tion of paying by the hour—DWANGO'S current billing method—looms large. Most experts agree that the "pay-to-play" model works best with games that are made free-of-charge to the consumer because it eliminates the \$40-\$50 users spend at retail, making an hourly rate more palatable. Essentially, then, Zone members who log on to DWANGO will be paying for one thing: latencies lower than anything that can be achieved on the Net. That such a market exists is beyond doubt. But whether it's enough to propel DWANGO into the major leagues of online multiplayer gaming is a question that can only be answered once the service arrives on the Internet Gaming Zone, and on the strength of the titles the service supports. For info on DWANGO, head to www.dwango.com. 


The New and Improved TEN

When is 10 not 10? When it's TEN 1.2. Total Entertainment Network released TEN version 1.2 in May, offering its 30,000 paying subscribers new communications options

and newsgroups.

"Much of our focus in the upgrade was making a wealth of new communications tools available both to ourselves and our subscriber base," says

Garth Chouteau, TEN's public relations director. "When you first start out, it's important to concentrate on performance and content. But now that the TEN community is evolving, we have to do what we can to nurture, maintain, and build that commu-

nity. For our subscribers to remain loyal to us when they can find many of our games for free elsewhere on the Internet, we had to provide them with more tools to communicate with each other and also look at how we communicated with them." 

Among the new features are Locate and Page options which allow players to find other members wherever they happen to be on the service, and then send them instant messages. A Mail feature provides users with a personal email account, and custom newsgroups have been devised to help players find others with like interests or tips and strategies to share.

TEN also promises faster game play with

the 1.2 upgrade, especially in fighting games such as *Duke Nukem 3D* and *Shadow Warrior*. TEN has also changed the format of *Dark Sun*, one of its hottest games.

"We worked with the folks at SSI to come up with an updated version," Chouteau says. "Basically, *Dark Sun* now has two separate worlds to appeal to two-player styles. There was one set who wanted to spend all their time

living out a more chaotic lifestyle than in the real world, laying siege and banding together in battles. But there were others who think in terms of cooperation and banding together to make positive things happen. This is a way to let both factions enjoy the game without a lot of confrontation between the two styles of play."

This summer, TEN members can try both the shareware and full version of *Blood*; play

Shadow Warrior, found exclusively on TEN; and take the throttle of the flight sim *SEF2000*. Also, TEN has exclusive rights to NASCAR *Racing 2*, which should be available in September. TEN bills NASCAR *Racing 2* as the first real online sports simulation—up to 32 players will be able to race, and official NASCAR tournaments will be held that follow NASCAR rules and offer cash purses. ©

elliances

Interplay announced that the only "official" multiplayer version of Redneck Rampage launched on Engage. The Engage version includes "exclusive levels not available on the retail" version, as well as limited-offer free "bonus" hours on Engage.

Microsoft has announced continuing growth in support of the online gaming DirectPlay® application programming interface. DirectPlay was designed to simplify matchmaking and provides API services for independent multi-application communication. The company says many

providers, including AOL's ImagiNation Network, Mpath, Networked Entertainment, The Palace and RTIME, have announced support for DirectPlay. DirectPlay for Windows 95 is scheduled to release as part of DirectX 5.0.

DirectPlay developers include Activision, Hasbro, 7th Level, New World Computing/3DO, Sierra On-Line, Sega Entertainment and Electronic Sports/Canada.

Spectrum Holobyte's **Microprose** unit shipped several hundred thousand units of *Magic: The Gathering* within the first few weeks of launch. Spectrum Chairman Gilman Louie said that future releases will add multiplayer Internet play. Regular

feature updates, at no charge, are available at www.microprose.com.

Sierra Online is scheduled to release *Sierra Pro Pilot* for Windows 95, their high-end flight sim and trainer, in August. The eagerly anticipated *Red Baron II*, with advanced AI and random mission generator, is scheduled to release in September. For more information: <http://www.sierra.com>

Novalogic has tied the release of *Comanche 3* with an EarthLink offer of 15-day unlimited access. EarthLink ISP software is included on the *Comanche* CD, and is structured as a "trial-period" offer. Kali shareware, with a 15-minute free flight time

limit, is also included. *Comanche's* multiplayer mode allows up to eight players. Later planned PC releases include *Comanche 3*, *Armored Fist 2* and *F-22 Raptor*, and *Werewolf vs Comanche 2* for Mac. For more information: www.novalogic.com.

Publisher GT Interactive; developer 3D Realms, a division of Apogee (developers of the *Duke Nukem* series); and id Software (developers of *Quake*) have launched a joint effort to develop and publish *Duke Nukem Forever*. This sequel to *Duke Nukem 3D* will utilize id's *Quake II* engine. For more info: www.gtinteractive.com; www.3drealms.com; www.idsoftware.com. ©



Profile:

ePlay is about gamers...not just games. That's why each issue will explore one of the "worlds" created when massive numbers of participants repeatedly come together to enjoy a multiplayer game (and each other's company). Here's a virtual world that's been attracting loyal players since 1989.

RPGs are played by some of the most faithful gamers around, and their obsessive nature is perfect for building and sustaining a virtual world. *GemStone III* started with a small, dedicated following some eight years ago and has steadily increased its player-base ever since. Still, nothing could have prepared the game's online publisher, Simutronics, for the flood of new players that have flocked to *GemStone III* since the game was added to AOL's gaming center. We spoke with Susan Dodd, who began her *GemStone* career as a devoted player...so devoted, in fact, that Simutronics eventually hired her. Susan (who plays three different characters in the game, but wouldn't reveal any of their names to ePlay) now serves as Product Manager at Simutronics where she oversees the entire operation of *GemStone III*.

Players Say the Darndest Things

"One of the objects you can find is a smooth stone. Well, in the last year, we've heard so many stories about what smooth stones will do. 'If you lie on your back at the north gate with the smooth stone in your hand, you'll absorb your experience faster,' or 'If you hold a smooth stone in your left hand, you hit harder with your right hand.' All these things players come up with from out of nowhere, then swear they've got proof. I won't say what smooth stones do...but they don't do either of those things."

—Susan Dodd
Product Manager, *GemStone III*

Game Background

Title: *GemStone III*

Developer: David Whatley (Simutronics' CEO) developed the first *GemStone* back in 1987, and followed up with a sequel a year later. *GemStone III* was created in 1989.

Nutshell Description: *GemStone III* is a medieval fantasy in which players assume characters, explore levels, and hunt treasure—you know, your basic RPG itinerary. First-timers use the Character Manager utility and choose from eight classes of character (sorcerer, cleric, bard, etc.), then select from eight character races (elf, giant, dwarf, etc.). After assigning a name to the character they've created, players take off on the quest of their virtual lives.

What Makes It Different?: RPGs are known for their expansiveness, but even by that standard *GemStone III* is incredibly vast—over 12,000 rooms, hundreds of spells, and several hundred character-types. Susan Dodd credits the game's megasize to two things. First off, the game has been in operation for nearly a decade, meaning there's been plenty of time for constant expansion through new additions and supplemental detail. Secondly, Simutronics works hard at tweaking the game. According to Dodd "We don't say 'Okay, let's do a bunch of building in the next month.' We're *always* building."

Online History

First played online: On GEnie in 1990.

Found on the following services: Still offered on GEnie, but also found on CompuServe, Prodigy, and AOL. As of June 1, players can go directly "to the source" and play *GemStone III* from Simutronics own dedicated site. For information on this subscription-based service, visit <http://www.gemstone.net>.

Number of unique Players in an average month: 150,000

Most players at any one time: 2,700 (When we talked with Susan—



around 6 p.m. (EST) on a randomly selected weekday—there were nearly 2,200 players online.)

Peak play times: In keeping with typical online usage, around 9-10 p.m. (East Coast time). And, of course, the *entire* weekend.

Average Time Investment:

On the Low End: At least 20 hours per month—less than an hour a day—just to be able to keep up with changes to the persistent universe and enjoy some *GemStone* activities.

On the High End: “Let’s put it this way: There are 740 hours in a month; I’ve seen people that had logged over 300 hours. I’ve seen people that had 400 hours.” (*ePlay* figures that 400 hours works out to be almost 12 hours a day for every day of a thirty-one day month. Now *that’s* dedication.)

Recent Growth: Since AOL switched to unlimited usage, *GemStone III* has seen hordes of new players. In



The number of *GemStone III* playhours has quadrupled since AOL first offered unlimited usage. This is the intro screen those players see.

terms of the average number of users per hour, that growth translates to a jump of nearly 400%.

Dedicated Staff: Aside from Susan Dodd, a handful of 4 or 5 Simutronics staffers devote

Special Events and Extras

Bonus Missions: *GemStone III* players are periodically treated to added “Quests” (some still written by CEO Whatley himself) that put players in special situations or special areas that are chock-full of puzzles. One related story-line revolved around a woman who was part human and part enchanted Puma. For months, players debated how to fulfill the Quest objective, which was to separate the human woman from her Puma identity.




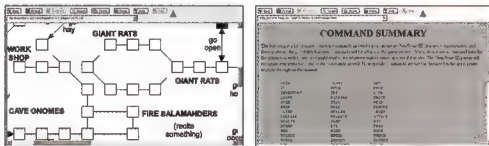
Some of the player-generated web sites have gorgeous graphics, like Laranna's Lair (<http://www.laranna.com/>).

Virtual weddings per average weekend: 2 or 3. Sometimes players even marry each other in “real life,” after having met and courted online.

Real world meetings: Small groups of players sponsor get-togethers (around twenty per year).

The Gemstone III Summit: The most recent official convention took place at the end of May at Simutronic's headquarters in Saint Charles, Missouri. SimuCon (which also attracted players of other Simutronic games) took place over a long weekend, with more than 300 players in attendance. Convention events included a medieval costume party, a “festival-on-the-green” picnic replete with minstrels and jugglers, tours of the Simutronic facilities, and a madrigal-style dinner.

Player-generated sites: You can find dozens of *GemStone III*-related sites on the Net. We asked Susan Dodd to mention a few: The Unofficial *GemStone III* Home Page (<http://www.tamcom.com/GS3/>), Zepath's Den (<http://home.navisoft.com/zepath/>), Lord Morandas' Mausoleum (<http://www.moran.com/>), and Laranna's Lair (<http://www.laranna.com/>). 



Many *GemStone III*-related websites are crammed with useful reference material. For instance, Zepath's Den (left, <http://home.navisoft.com/zepath/>) is packed with maps you can use to help explore the 12,000+ room *GemStone* world. For helpful abstracts, like this one detailing game commands (shown right), try visiting The Unofficial *GemStone III* Home Page (<http://www.tamcom.com/GS3/>).

"I'm the Sole Survivor..."

Online gamers, prepare to be commanded and conquered!

An Internet version of the bestselling *Command & Conquer* series is about to hit store shelves. *Command & Conquer: Sole Survivor* will support 50 players, each controlling a single battle unit.

"Instead of controlling an army, you try to be the last remaining unit by wiping out everyone else," says Technology Solutions' Glenn Mandel, Public Relations Spokesperson for C&C developer Westwood Studios. "*Sole Survivor* takes *Command & Conquer*

to new levels because players need to develop new strategies in order to win."

Like the other C&C adventures (4 million copies sold worldwide), players grab power-up crates, avoid booby traps, and blast enemies. Online gamers can form alliances or engage other units in battle. A Skirmish mode allows players to practice



Head for Westwood Chat at <http://www.westwood.com>.

before going online. Initially available only on Westwood Chat, Westwood's online gaming service, *Sole Survivor* should hit store shelves in July or August.



HEAT Network: Gaming with a Difference

Summer's here, and that means HEAT.

SegaSoft's HEAT Network provides multiplayer gaming with a difference. You've got your games, you've got your worldwide players, and you've got features not found in any other Internet gaming service.

"There are several significant differences in HEAT," says Greg Chiemiango, SegaSoft's Director of Communications. "For one thing, the membership program is built around the accumulation of player points we call 'degrees.' It works like a frequent-flyer program: on the free level you can have access to most of the games and accumulate degrees, but you can't use them. On a paying level, you can use degrees for entrance

fees, purchasing merchandise and software, or other things."

"Every player also has his or her own two-sided 'home page.' On your side you fill in the time of day you play, your schedule, favorite games, quotes, and so on. On the flip side is the competitive profile that everyone else sees. It includes a digital representation you've chosen and a game profile. With these pages, players can find you by searching for a particular game or someone who wants to play at midnight—there are a bunch of different ways to search."

In addition, HEAT allows players to communicate through email, real-time chat, bulletin boards, and a paging Java applet constantly

running on the site. To speed up gameplay, a player can recognize someone currently online by a blinking light, page that person, and instantly launch into a game page, a game lobby, or practically anywhere else on the site.

HEAT will include a mixture of games found on most Internet gaming sites, as well as some exclusive titles, primarily action-adventure and strategy titles. It's with these exclusives that the Sega name can help attract attention.

"The brand name itself is interesting," Chiemiango says. "When people see Sega, they'll at least take notice, although that doesn't mean that computer players are going to automatically take to us.

It helps more in the professional world—retailers and other business partners at least know we're serious. But SegaSoft is separate from Sega of America, and it's easier to be a company if you're focusing on either consoles or PCs."

SegaSoft anticipates revenue on the HEAT site from subscriptions, merchandise, and targeted advertising. HEAT boasted a 6,000 beta-test pool as well as 35,000 on a waiting list two months before its June launch date.



Feel the HEAT at www.heat.net/pub/index.html.

Tourney Time

Grab Your Golf Clubs and Jump Into Your Ferrari... Oh Yeah, Where's My Green Jacket?

At a time when membership fees are in constant flux, gaming services are finding that their online communities are only as strong as their willingness to sponsor special gaming events (i.e. tournaments). Tourneys are becoming huge revenue-builders and are attracting literally thousands of players into the gaming fold.

But the best tournaments aren't necessarily those centered around the coolest games. Instead, they tend to be the ones offering the most enticing prizes.

Intergraph Computer Systems and Rendition, Inc. teamed with id Software and ClanRing to sponsor a *Quake* tournament that concludes during the high-stakes software show Electronic Entertainment Expo (E3).

One-on-one qualifying competition con-

cluded during the spring on the Mplayer and ClanRing websites. Sixteen finalists won trips to Atlanta to compete at E3 (June 19-21st). The grand prize is a red 1987 Ferrari 328 GTS donated by John Carmack (the wizard of id) and an Intergraph Ultimate Game System—a TD20 with 32MB of RAM, a 2GB hard drive, 8x CD-ROM, and 17-inch monitor. Second-, third-, and fourth-place winners also win an Intergraph Ultimate Game System, as well as \$5,000, \$2,000, and \$1,000 cash, respectively.

"I bought my first Ferrari after the success of *Wolfenstein-3D*," Carmack recalls. "*Doom* and *Quake* have bought three more. Four Ferraris is too many for me. Rather than sell off one of them or stick it in a warehouse, I'm going to give

it back to the gamers that brought it to me in the first place. The king of this *Quake* death-match is going to get a really cool crown."

Likewise, big prizes are being planned for a *Jack Nicklaus 4 OnLine* tourney set for July.

"A four-day tournament off-line with a new car is big enough to draw 200 people, so an online tournament is sure to draw a lot more than 200 entries—and not just gamers," says Bill Linn, Director of Public Relations for *Nicklaus* publisher Accolade. Accolade has joined with Kesmai's Aries Online Games for a long-term partnership to publish the first online multiplayer version of *Jack Nicklaus 4*. Chris Holden, CEO of Kesmai, estimates a gaming audience of more than 12 million. Online features offered only in this version include using friends as caddies or joining a gallery to watch and chat about favorite

golfers. "We plan to have multiple tournaments—maybe as many as one per month—throughout the year," Linn says. "If you go to the Kesmai web site, you see a real community of clubs and groups. We



Competition for a Ferrari, even one ten years old, can get pretty intense. "Course that Intergraph Game System wouldn't be bad.

want to create that among our golf fans. And we'll have major sponsors so players will walk away with a really great prize."

Prizes for the July tournament are still being planned, but Linn estimates a jackpot of \$5,000 in prizes. A top-of-the-line set of golf clubs is likely to be the top prize. (ePlay's would-be golfers recommend an alternate prize: one of the Golden Bear's Masters Jackets. After all, he's got a closet full of them.)



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Check out one prospective prize at <http://www.intergraph.com>.



Victim No More:

Winning Tips for Command & Conquer: Red Alert

Westwood Studios, the developer of *Command & Conquer: Red Alert* introduced the genre of real-time combat strategy games to a large audience with *Dune II*. Westwood has made a great leap forward with *Command & Conquer: Red Alert*. To the casual observer, these two games may look almost identical, with one notable exception: *Dune II* moved along a fantasy story line and featured sand worms whose sole purpose it was to consume armored vehicles.

But even though Westwood abandoned the old creative story-line in *Red Alert*, it gave back much more in user-friendliness. Any dearth of imagination doesn't really affect the multiplayer game:

After all, when playing head-to-head against someone in California, who really cares if he or she represents the People's Republic of China or someone orbiting Betelgeuse? Where the original *Command & Conquer* and *WarCraft II* were lacking, this game picks up the slack: From the superb AI to the truly diverse capabilities of each alliance, *Red Alert* remains one generation ahead of any other real-time combat game.

Online play is mainly dominated by the ever popular "tank rush" method: First build multiple war factories; then an absurd amount of tanks; then gather them together and head for your opponent. While this seems to prove quite effective against unsuspecting players, I don't have a lot of respect for anyone who swears by this

strategy. This technique defaces the game's real beauty, reducing it to nothing more than a race to see who can build tanks fastest. So instead of saying, "Gee, I sure did beat the stuffing out of you," wouldn't it be nice to zap them with, "Hey, remember that time when I took out one of your tech centers with an A-Bomb, the other with my MiGs and—while your radar was down—my Tanyas took out enough power plants to disable your AA guns?"

As successful as the tank rush is against newbies, though, the bottom line is that there is no surefire strategy or tactic that'll guarantee you success. One wonderful aspect of this game is that for every attack, assault, or strategy there is a countermeasure—and that means even the tank rush can be stopped.



Silos are the least expensive way to extend your base

The tips and strategies here will help novice-to-intermediate players stay competitive online and hopefully will bring you more victories in your multiplayer battles. But remember, never stop exploring your imagination: The method above, for instance, is only one of a hundred different ways to disable your enemy's AA guns.

General Strategies and Tactics

Know your enemy: Is this opponent aggressive? Passive? Creative? Conservative? Organized? Just plain crazy? When playing a crazy or aggressive opponent, consider building barracks after your first power plant and start cranking out units; otherwise, start that ore refinery first so you can raise important revenues quickly. A strategy that crushed one enemy may be the fuel for another opponent's plans. Adapt your playing style to that shown by your opponent.

But unless you've squared off against a foe several times before, you may not have the luxury of knowing who you're facing (then

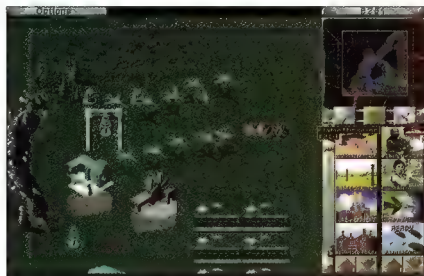
again, they won't know you, either). So an absolutely critical component of knowing your enemy is getting a visual of their every move. Get the radar map up and completely uncover all shrouds, even if a GPS Satellite is on the way. Then send out squadrons to deny your opponent the opportunity to gain the same knowledge. If an APC filled with Tanyas leaves the enemy base, extend the courtesy by having a greeting committee meet them halfway. Use the bookmark function to mark locations you frequently monitor: the enemy base, ore fields, enemy activity, etc. The ultimate goal is to become aware of all activity that occurs on the map.

Resource

limitations: Having enough asphalt to pave a road from New York to L.A., but only one worker to do it, would make for a lengthy task and the same sort of thing can happen in *Red Alert*. Lack of power and silo shortages can cripple you, so you should stay at least two advanced power

plants ahead of your needs: The cost is minimal, both in time and money. Let the enemy waste a few MiGs trying to take out extra power plants: Your cost for each is only 400 credits and 15 seconds of playing time per building, while their cost is 1,200 credits and 30 seconds per MiG. When power is not a concern, advanced power plants, with slightly less armor than construction yards, make good land barriers. Silos should be built in excess to avoid the "silos needed" warning—by the time you've heard it, you've lost up to 700 credits for absolutely no good reason. Silos are also the cheapest means of extending your base. We've dedicated a whole section below to the last resource, ore, and how to avoid money limits.

Offensive tactics: During combat, you should reduce the damage you're taking from enemy units as quickly as possible: if there's a weakened tank or artillery unit within range, make that your first target. Select only one or two marks and attack them with your entire force. Assuming that all enemy units are of equal health, attack in this order: artillery, small tanks, medium tanks, heavy tanks, mammoth tanks and then everything else.



Maintain a good mixture between offense and defense.

Provided your force is large, attack from several directions. This flanking technique allows maximum exposure and forces your opponent to split his concentration. With good organization it's possible to get behind the enemy, take out vulnerable back units, and surround the remaining forces; with this accomplished, eliminating the enemy will be quick and effortless. When attacking an enemy base by air, make sure you assign enough firepower to each target to finish the job; there's nothing worse than attacking two buildings, losing most of your units and destroying nothing.

Diversions: So many aspects of the game must be constantly monitored that even a seasoned player can overlook important details—and there are several ways you can increase the chances that your opponent will do just that. Send a small “disposable” army to attack your enemy's base every now and then. Spread your men out and make your opponent waste time chasing harmless units. This leaves him less time for planning or watching the radar as you bring in an APC full of Tanyas. In the normal course of the game,

when the radar is mostly clear, an APC moving from one base to another is easy to spot. Send out rocket men and mobile GAP vehicles to random locations on the map and you'll clutter the enemy's radar.

Once that's done, you can attempt a “secret mission” and use the rocket men as way points to create a diversion and thereby minimize the chance of detection. Other possible diversions: Send a squadron to beat up enemy harvesters, then back off when opposed; send your whole army to sit right outside their base (this could be dangerous); or send an empty APC into their base (this will really attract attention).

Never corner your enemy: A weakened opponent with nothing left to lose and nowhere to run often becomes relentlessly forceful. This intensity can be hard to overcome even when you have them outnumbered. Leave them some place to run until you're ready to finish the job.

Suggested reading:
Sun Tzu: *The Art of War*.

Unit-Specific Tactics

Harvesters: To become a contender in multiplayer games, money management is paramount to your strategy. *Red Alert* offers a simplistic economy: ore grows on the ground, you build ore trucks to harvest it, then sit back and reap the benefits. Your objective is to harvest so much that you never run out. Have at least two or three harvesters for



Grouping naval units with a transport and using “formation” allows all units to travel at transport speed.

every refinery you've built and at least one refinery for every major ore field. This means you may have a dozen harvesters by the end of the game, but remember that these units pay for themselves within a few minutes.

The decisive battle in an evenly matched game usually revolves around the control of ore: preventing your opponent from bringing in money guarantees victory. Only mammoth tanks are more difficult to destroy than harvesters, so protection is usually not an issue; should a harvester get harassed, order the unit to seek protection. Keep a couple of APCs filled with rocket men in the ore fields; if the enemy mounts an air attack on your harvesters, unload the men and watch them bring down a few helicopters. Engage enemy units away from your ore fields to conserve this important resource. Although the harvester AI is quite good, every now and then you may need to nudge one along to maximize its efficiency.

A patch of ore regrows according to how much ore is surrounding the patch, therefore if ore is limited, harvest in a checkerboard pattern to allow maximum regrowth. Gather nearby gems first; they are worth

Red Alert Web Sites

The best RA page I have found is <http://www2.dgsys.com/~babak/frames.html>. This page has tips of the day, which are kept updated over 200 free messages, many with thumbnails of each valuable resource for finding online players and tons of information on *Red Alert*. If you are into the game and want more, then check out the Red Alert forum at <http://www2.dgsys.com/~babak/frames.html>. The site also has a Red Alert strategy guide and a Red Alert index page. The results of these pages are <http://www.gamemaster.com/arena/ra/>.

Red Alert Other Hints

- **Nukes:** While nuclear bombs can take out buildings with precise drops, sometimes infantry casualties are the extent of damage done.
- **Sub hunting:** Sweep the sea with a destroyer's cursor—when the cursor turns to an attack symbol, a sub can be found below. A wounded sub will surface...use cruiser fire to sweep the sea. Cruisers going transport speed: Assign a group together to a naval unit, include a transport, and enable formation; now all units move at transport speed. Tesla plus flame plus concrete makes an incredible defense...
- **Radar protection:** Don't let the allies plant a spy in your radar hub.
- **Sub pen protection:** Build on a square away from the land and the pen cannot be infiltrated.
- **Mobile radar jam:** Jam's radar from 15 squares away.
- **APCs in transport:** Transports can hold five APCs—APCs can hold five men, thus a transport can hold twenty-five men and five APCs.
- **Air power protection:** Be sure to place AA guns in front of important buildings...you must get the planes before they reach their target.

twice as much as ore, take the same amount of time to harvest, and do not regrow.

Teams and Movement: Unit control is an art, and even though you can start playing *Red Alert* in just a few minutes, you won't be a winner very often unless you take the time to learn the extensive control options. Team assignments allow control over any number of units with a click of a button, and you can take advantage of each unit's strength by grouping them according to type: heavy armor, light armor, artillery, infantry, and so forth. At the start of a battle, select groups and then assign them targets or positions to protect your flank.

Teams lose their efficiency advantage during battle as groups

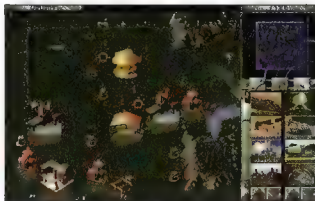
are reduced in number; use point-and-click and/or 'E' to reissue commands. The Scatter command is an effective tactic with faster units: A group of light tanks can defeat a similar complement of heavy tanks provided you use concentrated fire and the Scatter button. Also, if your infantry units are in danger of being annihilated, Scatter helps save some from seeing the bottom of an enemy tank (hit "X" constantly until the threat subsides).

Do not rely on unit AI in important matters. The undocumented key "Q" ("add waypoint") is another useful tool to keep the AI in check. Ever had that powerful split into two groups in order to go around an obstacle? After selecting a unit or units, hold down "Q" and click out the exact path you want the units to travel; units may act pretty dumb at times, but they maintain a strict code of obedience. Forced fire—telling your units to shoot at the same spot until you tell them otherwise—is effective for mine-sweeping or taking out unwanted walls, while force moving (going to a specific spot) is great for running over pesky infantry. (Ore trucks can take out an amazing number of soldiers before they're destroyed by enemy fire). The guard key is good in theory, but in reality produces a hero mentality, rather than team

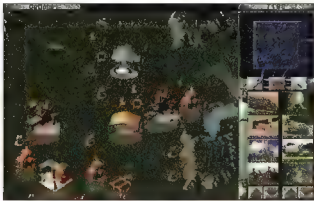
spirit, which gets individual units killed off too quickly. Escort should be used with caution: While this is another great theory, escorting units tend to get in the way too often to be really useful at protecting harvesters.

Mines: Mines are an invaluable tool for both defensive and offensive measures. Place mines around areas where enemy movement is likely: outside your base and in enemy ore fields are two prime spots. Two mines will bring a harvester's "health" down to nearly zero, and destroy a medium tank. Be careful to place mines in a checkerboard pattern to avoid having one detonate others.

Tanyas: Tanya, the most dangerous ground unit, can level a building or wipe out a group of infantry in seconds but is helpless against treaded vehicles—even so, these units thrive on wreaking havoc. Use an APC (and create a major distraction) to send Tanyas behind enemy lines, then unload the APC and watch the fun begin. Stop any enemy APC from nearing your base; if there's any chance the vehicle may penetrate your defenses immediately, build a pillbox or flame turret and place this troop-killer wherever the APC unloads. Also, keep your own APCs around to run over any loose Tanyas.



The A-bomb is fun to watch...



... but it only does minimal damage.



The effective range for cruiser fire is more than twice that of any other combat unit.

Stationary Defenses: Until your opponent attacks, there's no real need to set up permanent base defenses; instead, spend the money saved buying extra ground units. A good ground army serves as a perfect mobile base defense—and has the further advantage of not becoming obsolete after base expansions. Should a massive assault be launched against your base, change production to base preservation so that the structures can then be placed exactly where needed. Remember to repair any base defenses immediately.

Allies: *See the other players for Strengths, Weaknesses, and Strategies*

Strengths:
GAP generators, sea power, the Chronosphere, fake structures, and information

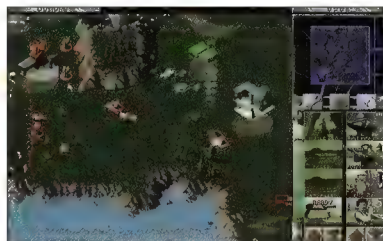
Weaknesses:
Air power

GAP generators deny your opponent critical information on your structures and units. Even though these structures drain power, they keep your entire base shrouded and thus limit enemy knowledge and air strikes.

A few cruisers can deliver the fire power of three mammoth

tanks per each burst and level an opponent's base in minutes. The Soviets attempt to duplicate this type of destructive power with their MiGs, but rocket men, AA guns, and destroyers easily counter this effort. Should an Allied player gain naval superiority, all other players have the option of selling or losing all structures within twenty-two squares of water. The Chronosphere will "beam" a non-infantry unit to anywhere on the map for a limited amount of time. Do not beam APCs: All units inside will be destroyed and future units entering the APC usually meet the same result. Beaming an MVC makes for an excellent reinforcement for a battle (building base defenses in the middle of a battle field) or building next to the opponents base. If you have lots of cash, an MVC "attack" will do well. The Allies enjoy an option to build fake buildings, and this should be

used frequently: They cost only 50 credits, add the illusion of greater strength, and will take some heat off the real buildings. Spies can gain a wealth of information from knowing how much money your opponent has, to the location of dangerous subs. To your opponent, these units appear as friendly infantry, and they can infiltrate the following buildings: refineries; sub pens (to reveal the locations of all subs), war factories (to reveal the type of unit being produced), power plants, (to show the power-to-consumption ratio), and radar. Once the enemy radar dome is infiltrated, you're able to see everything the enemy units can see, even under



Chronoshift an MVC next to your opponents base and build up defenses fast.

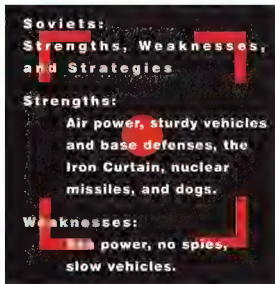


Fake buildings can intimidate your opponent and take the heat off the important structures.



Use MiGs wherever the opponent fails to build up air defense.

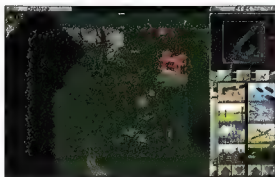
GAP protection. Beware of dogs, though—they can sniff out and chew up the defenseless spy before you know what's happened.



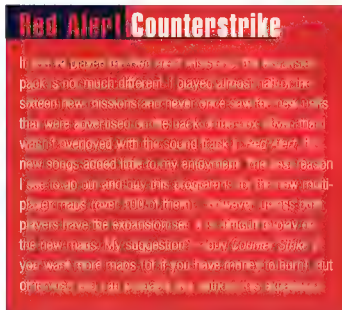
The air advantage given to the Soviets should be exploited to pound the enemy's base to pulp. Six MiGs can destroy any building in one pass. Giving up armor for speed and quick reloading time, these units are a major hazard to any undefended enemy structure. However, attacking heavily guarded areas is not recommended; use the waypoint key to maneuver around AA guns and rocket men. The YAK is effective at mowing down infantry units and mine-sweeping, and the Hind

Helicopter's ability to hover above targets means it's best-suited for targets which can't fire back. The spy plane should be reserved for uncovering GAP protected areas so MiGs can target enemy buildings.

Soviets vehicles are slow yet solid: no surprise attacks with these guys. Keep your heavy-to-mammoth tank ratio around 5 to 2; mammoth tanks by themselves are vulnerable to hit-and-run tactics, but on the other hand they do provide air defense. The Iron Curtain makes one unit or structure invulnerable for nearly a minute, so when using it be sure to pick a unit likely to take the first fire; this special capability is best saved for defensive measures. While nuclear bombs can take out buildings on good drops,



Use the Iron Curtain on a unit likely to take the first fire.



sometimes their damage is limited to nothing more than infantry casualties. Dogs can sniff out spies (should one have the misfortune to pass by) and are excellent at jumping rocket men, but fall quickly under regular gunfire. Be sure not to allow the Allies to take the sea. Subs should keep their distance when attacking:

they are not allowed to shoot through each other as tanks are. Destroy all naval yards right away. Use air power if necessary to suppress naval development. The Soviets' limited ability to gather information and inability to *hide* information, as the GAP structure does for the Allies, can be damaging when opposing an observant player.

Conclusion: The Allies offer players speed, cutting edge technology and variety.

Quake & Bake

EPLAY's

Recipes for Quake Stardom

Quake has been out for quite a while now, but just like its predecessor Doom—the game that played a pivotal role in getting the online multiplayer revolution rolling—thousands of new players are discovering the incredible intensity of Quake deathmatches every day.

Are You Comfortable?

There are really only three major things to master in order to start down the road to becoming an expert Quaker: finding a keyboard configuration that works well for you, learning to move instinctively with that keyboard configuration, and burning the layout of each level into your memory. If you're playing against other

But if you're one of those new players, you've probably found out that playing Quake online is much more challenging than in single-player mode because many of the gamers you're facing have been sharpening their deathmatch skills for months. To help you hold your own in the bloody (but fun!) world of multiplayer Quake, we've asked resident Quake fiend Martin Dault to compile some essential tips that will help newbies hold their own against veterans, rather than becoming so much Quake fodder.

novice-to-intermediate players, mastery of the first two is usually what separates the elite from the meat. As you start competing against advanced players, though, it's the players who know every detail of a level—particularly the locations of secret passages, weapons, power-ups, and teleporters (especially the ones where players can re-enter the

game after being killed, who usually emerge victorious.

The first step in becoming a fearsome Quake killing machine is finding a configuration that suits your needs. When developing Quake, the guys at id Software realized that the more comfortable you are with your keyboard configuration, the less you think about what your fingers are doing—which in turn allows you to focus all of your



Quake is a trademark of id Software, Inc.

www.eplay.com



Only a small part of *Quake*'s customization capabilities.

attention on the game. For that reason, *Quake* was designed to give gamers myriad options for customizing nearly every key on the keyboard. The easiest (but limited) way to customize the keyboard is to go to the Options menu and select Customize Controls. There are other ways of changing the key definitions, but they're a bit more complicated, so we'll get to those later. For now, the Customize Controls menu allows you to assign keys to the most used and useful *Quake* commands.

The most critical aspect of assigning keys is ergonomic: The less you have to move your hand around on the keyboard, the better. If you've played *Doom* or *Duke Nukem 3D*, you've probably already come up with a basic configuration that you favor, and more than likely you'll find that you're able to closely approximate that configuration with *Quake*. But if

you're new to first-person action games like *Quake*, the best thing to do is to experiment and find something that suits you. One important thing to remember is to make sure you have keys assigned to strafe left and right, as these two

movements are absolutely crucial to survival (and in racking up frags). Another essential is to have a key assigned to select the next weapon in your inventory, and keep a finger planted on it pretty much at all times. But the most important customization option doesn't even involve the keyboard:

learn how to use the mouse! Many people don't realize that *Quake* was designed specifically to be played with the mouse, and it's almost impossible for keyboard-only players to win consistently against mousers.



To succeed in *Quake*, you must avoid being shot by the other guy (or you must shoot him or her first, of course). The best way to do this is to constantly be in motion—but simply running headlong at top speed in one direction isn't going to save your skin because it's easy for an enemy to "lead" you with his fire. Enter strafing, where you "slide" left or right. Strafing becomes vitally important as the skill level of the players you face gets higher because with strafing, your opponent can circle you



Circle strafing for strategic advantage.

while never letting you out of his sights.

Here's how it works: Strafing slides you left, for instance, and if you begin to turn right as you slide left you start traveling in a circle. Quakers around the globe call it "circle strafing" (*Descent* players call it the "circle of death"), and it will become your primary method of attack—no more stopping in the middle of a room and futilely turning round and round in an attempt to better target someone.

Another more controversial move that some players claim decreases your chances of being shot is to always jump. I'm not sure how this is supposed to increase your survival odds, but some people swear by it. Something to consider, however, is that you make a noise every time you jump. In a match with 16 players (or even 32 if you're playing on a *Quake* World server), that's not a very big deal. But when playing one on one or against a small number of opponents—especially if they're experienced—that sound created by your jump could very well be your downfall.



To jump, or not to jump... ask this guy how much good it did him.

The next thing to learn to do is to look around—and this is where the mouse becomes your best friend. With the console command +mlook (read on for more about console commands),

your mouse transforms from the dinky way of moving forward into a powerful tool that lets you look in any direction! The `+mlook` command tells the game that moving the mouse forward means to look up, moving the mouse backwards means to look down, moving it left means look left, and so forth. (If you'd like to look down by moving the mouse forward and vice-versa, select "Invert Mouse" on the Customize Controls screen). This command also cuts out the need for keys bound to turn left and turn right, further streamlining your configuration.

Console Commands 101

I mentioned earlier that there are other, more complicated, ways of changing your configurations and here is one of them: console commands. To use console commands, you first hit the tilde ("`~`") key to bring up the console, and then type in the command.

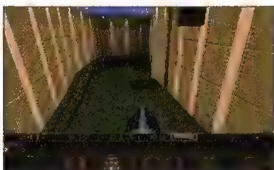
There are a zillion+ console commands, most of which I don't even know, but I'll introduce you to some that I feel are important. One of the best commands to know is "`bind`." Bind is used to assign an action to a certain key.

For example, if I wanted my "`s`" key to move me forward, I would go to the console and type bind `s` `+forward` (you could also do



View with the crosshair.

type "`crosshair 1`" to put the crosshair on your screen; "`crosshair 0`" removes it. For a more in-depth explanation and a



Same view, no crosshair.

this particular type of binding from the Customize Controls menu). Bind can also be used to assign values to the mouse buttons in the same manner. Bind mouse1 `+attack` would make the left mouse button the fire button.

Another useful command, if you're playing on Mplayer, a Quake server, or through any other dial-up connection is the "`ping`" command. This command will show you the ping time for you and all the other players—in short, how fast each player's connection is to the game server. I've found this to be such a useful tool that I've bound the ping command to my "`p`" key.

One console command you might or might not want to use is "`crosshair`," which toggles an aiming crosshair on your screen. I personally find the crosshair distracting—it obstructs my view and I find I do better without it—but so many other people find it to be such a great tool that I should at least mention it.

At the console,

comprehensive list of all of the console commands, pay a visit to www.stomped.com/console.html.

Was That a Right or a Left at the Quad Damage?

We've reached the point where the only thing left to do is to learn the levels so well that you dream about them. The best way to learn the levels is to spend time playing Quake. Moreover, when learning levels, keep in mind certain things, such as the placement of key items, strategic advantages in ground, etc. Also, it helps to know the "combat value" of various items. By combat value, all I mean is how much good something does you while you're being shot at by the other guy. One example is the Red Armor compared to the 200 Health. Many inexperienced players seek the 200 health above the Red Armor because they see it as a direct boost to their health. However, what they fail to realize is that it takes fewer hits to kill someone who has 200 Health and zero armor than it does to kill someone with full Red Armor and 100 health. Also, don't overlook the difference in Yellow Armor and



The ping command at work: the lower the ping, the better.

Red Armor. Red Armor is preferable to Yellow armor in every way; the only reason to pick up Yellow Armor when you have



Capture the Flag provides another forum for competition.

Red Armor is if your armor is down to about 40 or less.

As you play, note the proximity of the various "important items" to other "important items." Once you have it worked out in your head that the Quad is near the Armor, which is near the Super Nail Gun, etc., you'll start running that path as a loop. Many players develop this habit without ever really thinking about it because it is the best, most efficient way to kill as many people as possible in as short a time as possible. Also, the idea of running loops touches on the idea of "deny thy enemy," which is a philosophy I have been playing by since day one. Think about it: If you pick it up, they can't use it against you. Loops also bring up a real point of contention between *Quake* players: camping.



Oh the goodies that can be yours, if you know where to look.

Camping is the act of sitting in one place and just blasting anyone who happens by. Many *Quake* players argue that camping is unsportsmanlike and unfair. However, some enlightened players have realized that camping is just another aspect of the game. As the saying goes, "All's fair in love and war," and *Quake* certainly fits into both categories. Personally, I find long-term camping to be no fun, just as I find campers no challenge to kill; however, I have been known to sit atop a ledge for a moment or two in hopes of fragging the next thing that moves.

The last aspect of knowing the level maps, which in my opinion separates the truly serious *Quake* addicts from the weekend enthusiasts, is learning the respawn points. Far from being random, the places where you respawn after you die are quite fixed and occur in a certain order. Once you learn where these respawn points are—and the order in which they occur—you can utterly destroy your opponents. I had the privilege of playing a player recently who knew DM2 down to the respawn points and let me tell you, I've never been rocked so hard in my entire life. He fragged me within ten seconds of my respawn every time for a period of about ten minutes. I was a bit frustrated, but still impressed nonetheless. I believe the final score was something outlandish like...46 to -2.

Tricks of the Trade

■ **Rocket jumping:** By firing a rocket directly below yourself and jumping at the same time, you'll find yourself flying farther skyward than ever before.

This move can be used to explore regions of the map previously denied you. You'll find that many ledges you previously thought inaccessible can become your camping havens. However, some players have adapted this move into a more offensive technique...

■ **Death from Above:** The success of this move directly depends on your ability to pull off a rocket jump because, as suggested by the name, this is a sky-bound attack. The technique consists of a rocket jump followed in quick succession by another rocket aimed at the opponent. The other person is usually disconcerted enough by your disappearing above the level of their vision that they become easy prey for a rocket from above.

■ **Dishonorable Discharge:** A bit of a controversy among quake players is the idea of discharging. When you fire the light-



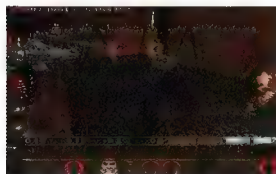
Stage one of a rocket jump...



up, up, and AWAY...

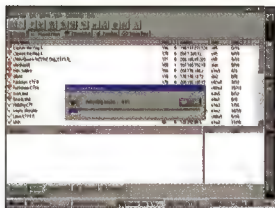
ning gun under water, you "empty the clip" so to speak because all of the ammo you had for the gun is used in one BIG blast. Consequently, you almost always die when this happens; unless you happen to be playing Teamplay 1. Many consider this an act of cowardice; however, it's pretty much an accepted part of the game in the upper echelons of players. The reason for this is that when you discharge, everyone else in the water dies (and sometimes people who aren't in the water but are vertically over the water die as well). Thus, if there happen to be three other people in the water when you discharge: you lose one for a self-kill, but you gain the other three... you come out ahead by two frags! Most of the higher-level players are of the mindset that a frag is a frag, regardless of the method by which the death occurred.

Teamwork is Everything



Clan Black Autumn hanging out before their match with Clan PMS.

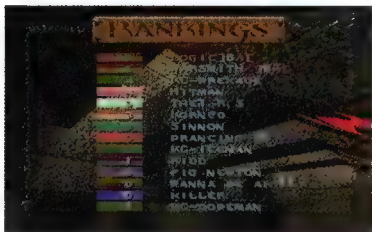
■ **Teamplay 1:** Also known as "newbie *Quake*" by those with more experience, this version of teamplay does not allow for friendly fire. This means that no matter how many times



The qspy screen.

you shoot somebody wearing the same color pants as you, you will not be able to kill them, you can only deplete their armor. This also means that you cannot cause damage to yourself, which makes for very sloppy playing habits for any who even think they might want to join a clan. Teamplay 1 encourages the "kamikaze" mindset—a style of playing which will get you killed faster than an opponent's weapons' fire in a Teamplay 2 game.

■ **Teamplay 2:** This is the teamplay used in all "official" clan matches and it seems to be preferred by most of the top Quakers. Teamplay 2 offers the added challenge of being able to kill your own teammates. The penalty for killing your teammate, however, is the loss of one frag from your score. More and more players are flocking to Teamplay 2 because of the more realistic nature of the battles; you must be careful about distance using certain



Team work really is everything.

weapons, trying to avoid hitting team members, etc.

■ **Teamplay 0:** no teams. Free-for-all.

Accessories for Variety

There are more *Quake*-related programs and add-ons than you can shake a nailgun at, so I'm going to focus on only three of the



The death of a Reaper Bot.



A Reaper Bot in action.



These Reaper Bots keep popping up in the strangest places.

best: *Quake Spy*, *Reaper Bot*, and *QuakeWorld*. Besides being (in my opinion) three of the best *Quake*-related programs, these are all available free over the Internet.

Quake Spy is a program that pings an entire list of *Quake* servers—servers that are constantly running games of *Quake* that anyone can join at any time. *Spy* returns information like who's playing on each server, what your ping time is to a server, what level



Check out these cool "skins".

is being played, and more. With this program, you can usually find a game being played on a level you know and with the number of players you prefer. Because of the ping statistics, you'll know in advance whether the server's close enough in cyberspace to ensure smooth gameplay. Simply put, *Quake Spy* is a god-send. The *Quake Spy* page is: <http://www.quakespy.com>.

Reaper Bot is another must-have for any *Quake* addict. These bots are the best out there for combat AI, learning levels, accuracy, and so on—in other words, these things can give you quite a run for your money. You'll find that when you play these things you die rather frequently—but if you hop onto a server after playing these bots

for a while, you'll notice a drastic improvement in your gameplay. Make no mistake: These bots will force you to get better.

The Reaper Bot has no official homepage, but it can be downloaded from this site: <ftp://ftp.cdrom.com/pub/ldgames2/quakec/bots/reaper>.

QuakeWorld is an add-on for the full version of *Quake* that plays only over a network (the Internet). Some of the most important features *QuakeWorld* offers over regular *Quake* are tracking of player statistics and information on a central "master" server, reduced latency when playing over the Internet, 32-player games over the Net, and more. Another cool feature you'll see when playing on *QuakeWorld* are "skins"—customized outfits designed to give each *Quake* clan (a group of players who often play team matches together) a distinct look.

For more info, check out *QuakeWorld*'s Official home at <http://qwcentral.stomped.com> or Frag.com at www.frag.com.



Most of my knowledge of *Quake* comes from two things: practice and the Internet. While I can't give you the first, I can get you started on the second by passing on the sites that I have found to be the most helpful to me.

www.bluesnews.com: Probably the best news site out there for *Quake* and *Quake*-related updates.



My credentials? Read 'em and weep, kids.

www.planetquake.com:


Another excellent news site with the addition of several extra sections.

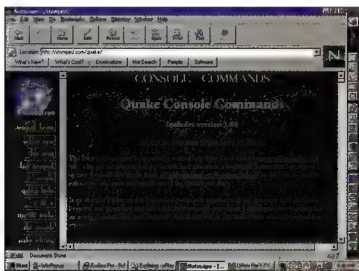
www.stomped.com: Probably the best overall *Quake* site on the web today with helpful hints and insights for players of all skill levels.

www.silpgatecentral.com: The search engine of the *Quake* universe. If you need to find it, check here first.

www.frag.com:

A great site dedicated to *Quake* and *QuakeWorld*.

These Web sites are chock-full of *Quake* modifications ("mods"), add-on files, and links to even more *Quake* sites—but no matter how much they teach you, the best weapon in a *Quake* player's arsenal is still experience. Nothing makes a player improve faster than playing six to eight hours a day. I realize that real life prevents all but the luckiest of *Quake* addicts from enjoying this pleasure. Of course, after you've racked up a few frags using your new skills you may start re-evaluating this "real life" thing, anyway. 



Stomped.com's console command page.

ePLAY's reviews are graded

according to the **A-F** scale we've all grown up with. Many factors influence the grade a game receives. Here are some of the most important ones: **Concept**

How fresh is the idea behind the game? How well is that idea implemented?

Gameplay Is the game fun to play?

Does the action keep the player hooked?

Interface Is the game organized in a way that makes sense? Is it easy to get

around through the various parts of the game? **Graphics** and **Sound** How

impressive are the game's looks? Does the audio complement the game?

Performance How well does the game run? How does it perform during online or multiplayer games and on LANs versus dial-in, etc.?

Given that **ePLAY** is *solely* dedicated to covering the online and multiplayer gaming experience, you can expect us to devote part of each review to how easy and how enjoyable it is to play that game online (or through a multiplayer game). **ePLAY**'s reviews (and the grades they carry) reflect the opinion of the individual reviewers, and the weight of individual review criteria are considered subjectively by individual reviewers.

Minimum System Requirements:

There's nothing more frustrating than putting \$50 into a piece of software, and then discovering that your system can barely run the program. We suggest you visit the publisher's web site for operating recommendations, in addition to checking out the minimum system requirements (which we list).

Game Services are referenced in relevant reviews. Here's the latest information on the companies you'll find most frequently mentioned:

TEN (Total Entertainment Network)

URL: www.ten.net

Rates (http://www.ten.net/html/ten_rate_plans.html): Hourly plan is \$9.95 per month for 5 hours of TEN and 5 hours of Internet connection if using a TEN local dialup provided by the Concentric network; additional hours \$1.95 plus \$.95 per hour if using a TEN local dialup provided by the Concentric network.

Flat Rate plan is \$19.95 for unlimited use of TEN (no Internet access included), plus \$.95 per hour if using a TEN local dialup provided by the Concentric network.

Mplayer

URL: www.mplayer.com/mplayer-home.html

Rates (<http://www.mplayer.com/about/about-faq.html#faq11>): No charge for games supported in Mplayer Free Zone, \$29.95 per year for games supported in Mplayer Plus. Mplayer is also an ISP offering WebBullet Internet Service at \$19.95 a month for unlimited Internet access through PSI's nationwide network.

Engage Games Online

Engage games are also currently accessible through America Online, EarthLink, and Concentric Network, and soon will be accessible through CompuServe, Jones Internet Channel, and Prodigy Internet; check with those services for their particular pricing plans to play Engage games.

URL: www.gamesonline.com/n-index.html

Rates (<http://www.gamesonline.com/n-index.html>): \$1.95 per hour, no monthly subscription fee.

ICI Games WarBirds, Planetary Raiders

URL: www.icigames.com

Rates (<http://www.icigames.com>, choose "sign-up info"): First five hours free; afterwards membership is \$10.00 per month, which pays for the first 5.7 hours (CRIS members) or 5 hours (all other users) of actual arena game time. Additional time is billed at \$1.75 per hour for users connecting via CRIS, \$2.00 per hour for all others.

EarthLink Network's Arena Offers Aries Games Online, Engage Games Online

URL: www.earthlink.net/thearena

Rates (http://www.earthlink.net/thearena/registration/pricing_info.html): \$2.25 per hour for those who use EarthLink network as their ISP, \$2.75 for all others

Delphi Offers Aries Games Online

URL: www.delphi.com

Rates (<http://www.delphi.com/dir-html/benefits/register.html>): 3 cents per minute for those who use Delphi as their Internet provider; all others pay a \$6.95 monthly subscription fee (or a \$34.97 annual subscription fee) in addition to the 3 cents per minute rate.

DWANGO

URL: www.dwango.com

Rates (listed in DWANGO.DOC file which accompanies DWANGO client software): \$7.95 for first five hours of actual gameplay time; additional game time can be purchased in the following blocks: 10 hours for \$19.00, 20 hours for \$34.00, and 40 hours for \$59.00. Note: Users without a DWANGO server in their local calling area will also be responsible for long-distance charges.

KALI Kall's software allows you to play games that have IPX network support over the Internet.

URL: www.kali.net

Rates: One time registration fee of \$20 to enable the software; all game time on Kali servers is free of charge.

- Remember that information on pricing, services, and even URLs changes frequently. Get the latest information at the service provider's web site. Manufacturer's Suggested Retail Price (MSRP) is not necessarily the same as street price. As always, we welcome comments and suggestions to our editors at email@eplay.com. You may also correspond via our web site, www.eplay.com.

Meridian 59

Developer: Studio 3DO Publisher: Studio 3DO

What determines the value of a game like *Meridian 59* is the people who maintain it and the people who use it.

Traditionally, a MUD—short for Multi-User Dungeon or Dimension—is a text-based game in which people meet and role-play characters existing in a fictional world. Unlike multiplayer hits such as *Quake*, *Red Alert*, *Diablo*, and others, the prime attraction of a MUD is the interaction between people, not victory or defeat. Why the discourse on MUDs in a review of *Meridian 59*? Because that's just what *Meridian 59* is. Set in a fantasy world of warriors, monsters, knights, and magic, *Meridian 59* uses graphics to help create a gaming universe—but the long and short of it is that it's a MUD, and a very good one at that. Because it's a MUD, its appeal lies not in its visuals, but in its sense of community—and while it costs money to play, the expense is more than offset by the rewards.

Meridian 59's graphics are impressive by the standards of the text-based MUD, to be sure; then

again, it doesn't take graphical wizardry to visually outshine a screen full of text, and the graphics don't come close to the complexity found in a *Myst* or even *Quake*. The artwork for characters and creatures is unremarkable and unvarying; only three or four sprites are used for all non-player characters (characters not controlled by other living people).

At first glance, the game itself isn't at all remarkable—but what determines the value of a game like this is the people who maintain it and the people who use it. The makers and maintainers of *Meridian 59* seem like a nice bunch, and many of them participate in the game as well as patch the code. They're constantly seeking to improve the world they've created—a world in which they participate as much as the paying customers. And while most *Meridian 59* players tend toward the friendly, there's definitely a

dark undercurrent beginning to surface: the random player killer (pker) is a ghost which haunts every facet of interaction in *Meridian 59*. Fear of (or desire to become) this near-mythical beast has led to a great deal of animosity:

Players accuse others of altering code and using other means to wipe out fellow adventurers, with no solid proof to back up those claims. Success in *Meridian 59* revolves around finding a mentor or group of friends with whom you can face the dangers of monsters and evil-minded players. Once you do this, the game's flaws fade as exploration and intrigue grow, devouring hours of your leisure time.

Meridian 59's lackluster graphics keep it from becoming a bandwidth demon like *Quake*, but it plays fairly well with a range of connections. Latency spikes are a problem, though, and lead to some oddities: players hovering in mid-air and monsters barreling through you (oddly, with no damage caused).

With so-so graphics and several cheat problems (selling items repeatedly, avoiding the “red” mark of a player killer), *Meridian 59* should be a bad game—but it somehow manages to recover from its blemishes to entice, entertain, and entrap the unwary player. A freely available demo allows access to a controlled area of the game. Try it out: If you're able to stomach the interface, it'll provide you with more than your money's worth.

—John Cocking

DISTRIBUTION & PRICE:

Retail, or download from <http://meridian.3do.com/meridian>

Software is \$14.95 for authentication code if downloaded, approximately \$25 at retail; \$9.99 monthly subscription fee for unlimited access to service.

PLAY SITES:

Meridian 59 service

SYSTEM REQUIREMENTS:

486DX2/66MHz, 8MB RAM, 35MB hard-drive space, SVGA, 2X CD-ROM (if installing from CD), Mouse

NUMBER OF PLAYERS:

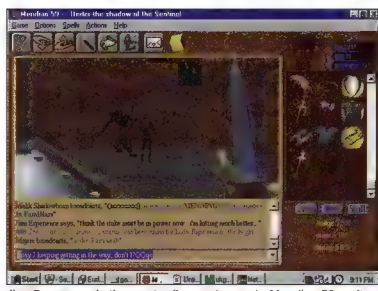
Thousands

DIFFICULTY LEVEL:

Intermediate

URL FOR MORE INFO:

<http://meridian.3do.com/meridian>



Jimi Experience is the mentor figure who made *Meridian 59* exciting for me. Here, he saves me from a troll.



Jack Nicklaus 4

Developer: Cinematronics Publisher: Accolade

Play a championship golf course ... or design one of your own. The choice is yours with *Jack Nicklaus 4*.

DISTRIBUTION & PRICE:
Retail, \$59.99

PLAY SITES:
Arcs

SYSTEM REQUIREMENTS:
IBM PC
Pentium 90 (Solo Play)
Pentium 133 (Multiplayer)
16 MB RAM
Recommended: 20 MB
RRAM (solo) 24 MB
RAM (Multiplayer)
2X CD-ROM Drive

NUMBER OF PLAYERS:
1-4 (more in JN4T tournaments)

DIFFICULTY LEVEL:
Easy

It's more than just another game struggling in the shadow of *Links LS*: It's one of the premier game creation utilities on the market. Featuring a course designer as well as a full game and online play, *Jack Nicklaus 4* misses only a few minor features on it's way to the 19th hole.

Accolade's *Jack Nicklaus* games are classics of the PC. Their long lives on many computers are due not only to the basic qualities of the golf simulation itself, but to the incomparable design utility that allows users to create and then play their own courses. Despite being upstaged several times over the past few years by sims that both played and looked better, courses for Jack Nicklaus Signature Editor continue to be built and traded over the Internet in volume. This continuous supply of fresh courses numbers in the hundreds, all of which can be converted for use with *JN4*, and gives *JN4* more available courses upon release than all

the other golf games combined. That's not even counting all the new courses that are being created right now with *JN4*. (Augusta is already out... unofficially, of course.)

JN4 is a solid golf sim

with all the options you could want. It ships with five courses: Winding Springs, Muirfield Village, Colleton River Plantation, Country Club of the South, and Cabo del Sol. Most interesting of all is the Winding Springs course, which is a fantasy course created by Nicklaus's design team using the editor. The game runs in native Windows 95 mode, with resolutions up to 1600x1200 in a full 16.7 million colors, providing a broad, detailed view of the course. Visually it's quite good. It's not as consistently gorgeous as *Links LS* (what is?), but it draws faster and allows for custom course creation, so there's a trade-off. You shouldn't get the idea, however, that the game isn't graphically satisfying. Terrain and object modeling is top-notch, and water reflections are superbly.

Control is handled via the familiar three-stage power bar: click to draw back the club, click to set the power of the swing, and click once more for accuracy. An aiming arrow allows you to "warp" your swing trajectory and put a slice or hook into the shot. The entire swing bar is incorporated right into the onscreen golfer, which is fairly well-rendered. An annoying 3-5 second hitch in the swing occurs if you have the reverse angle ball-landing camera turned on (it's obviously loading the next view into memory), but this can be remedied by simply switching the landing cam off. Ball dynamics seem solid for the most part, but hitting on



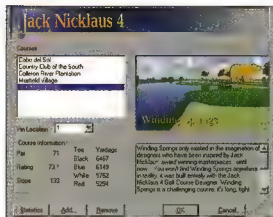
Graphic flourishes such as fog and water reflections are just a couple examples of the impressive visuals in *Jack Nicklaus 4*. It's not quite as gorgeous as *Links LS*, but it's very close.



The semi-circular power bar in *Jack Nicklaus 4* is based on the movement of the club during a shot, a very intuitive design that helps you get just the power you need slopes should affect shots a bit more.

An excellent multiple view window gives you a handle on shots made from almost any height or angle. It opens up as a top-down view of the course with a camera icon that you can drag to any part of the course and then aim. The view draws, and then you have the option of choosing a height level ranging from 1 meter to 30. The lower angles are especially helpful for reading greens. The only disappointment is that you can't keep different custom views open at the same time, and you can't shoot in a custom view: you have to return to the main view.

There are plenty of play and scoring options to keep things lively and make head-to-head more interesting. Tournament play, skins, match, stroke, bingo bango boingo,



Jack Nicklaus 4 comes with four real-life courses covering a nice variety of geographic settings, as well as the fictional Winding Springs course—which was built entirely with the *JN4* Course Designer.

and sudden death are all available. You can play solo on a whole course, or practice a few holes of any course. There are recorded golfers to play against, including Nicklaus himself, but unfortunately that's all there are: recorded rounds. They play the same every time, instead of being "AI"-style opponents. This makes the multiplayer mode all the more important, so it's a good thing it's implemented well.

Multiplay is enabled via serial cable, direct modem connection, LAN (IPX), or TCP/IP for up to four players. Connection is pretty clean, but foursome play can drag as you wait for everyone in your party to shoot. TCP/IP works better than most DirectPlay games, even across Internet providers. Just punch in the IP address of the host and you're off. The big news, however, is the *Jack Nicklaus Online Tour (JNOT)*, which Accolade and Aries are working on for a possible summer release. JNOT will be "delivered" as a 25+ meg download that contains a new front end and multiplayer engine. JNOT will allow thousands of people to compete in tournaments for real prizes ranging from clubs and up (possibly even a car) provided they can get the right sponsors. JNOT, which is exclusive to Aries, will also have a chat area, scoreboards,

news, and a full download and evaluation site for new courses.

The most important part of JN4, however, is its course designer. A fairly user-friendly set of utilities, the course designer allows you to set routing for a full 18-hole course through the use of "wizards." Just enter the length of the hole and the angle of any doglegs, and it lays out a full course map. You can rearrange these holes for better routing, and then edit each one individually.

Using a set of simple tools, you can raise and lower terrain elevations, create new terrain areas with such terrain types as water, sand, dirt, green, fairway, rough, and more. These areas are laid out by just drawing lines and then manipulating handles to change the shape of the form. In this way you can create a deep bunker in under a minute, then reshape it and smooth its contours. Elevations are handled a little crudely, but the result is reasonably effective as you play with raising and smoothing hills and roughs. With the 3D window open, you can watch the course take shape as you work on it.

A large pallet of about 100 objects enables you to place a wide variety of trees and bushes, as well as incidental objects such as benches, ball washers, and tee boxes. All objects are completely scalable, and can be moved and rotated as needed. Different green and bunker shapes are provided to

speed up course creation, and a variety of panoramic backgrounds—such as mountain, desert, and seaside—provide the backdrop to your course. Heck, you can even place sound cues on the course for different bird and frog sound effects. Though a custom-object creation feature and PCX importation for backgrounds would have been nice, these are minor issues for an excellent, well-implemented system that will soon be spawning dozens of new

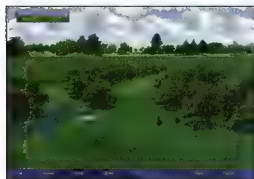


Terrain objects like cacti and sand bunkers are excellently rendered—but if you're seeing them this close up, you're probably paying more attention to the graphics than to your game!

courses for download. One drawback: The quality of the images means the average new course is about 6 megs.

Golf fans have been waiting a long time for *Jack Nicklaus 4*, and they won't be disappointed by the results. The few flaws are minor, and are overshadowed by the game's undeniable qualities. This is a terrific piece of software.

—T. Liam McDonald



Use the Custom View to get a panoramic perspective of the hole you're playing—perfect for avoiding hazards and setting up approach shots.



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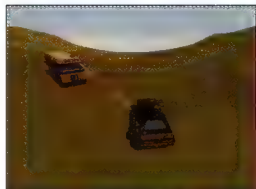
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Playing chicken with the bus plays right into its awesome forward armament.

force (just try a handbrake turn for a quick about-face to see what we mean).

The visual aspect is also strong, with many ways to view the action. Some of the outside shots border on the cinematic and give you a great view of the overall action. You may wonder why the designers have elected to oversimplify the character figures in the introductory and transition screens (Groove and his pals have practically no facial features, for example). That simplification keeps the animation from bogging down, while still allowing the visuals to convey both the drama and the time period of the scenarios. Besides, the designers managed to put the graphic detail where it really belongs—on the cars. Visual feedback on the vehicles is really awesome, given the fast action. Smoke and body damage are all portrayed fairly realistically, even though all the cars (and buses and trucks) can absorb more damage than a NASCAR stocker crossed with an M1 Abrams.

About the only area where the game might eventually prove tiresome is with the soundtrack. Those 70s sounds and dialogue are cool for the first hour or two of gameplay, but they do wear thin after a while. Taurus' running jive commentary, for example, can really be irritating, often sounding

like rejected dialogue from "I'm Gonna Git You, Sucka!" (itself an over-the-top parody). Fortunately, you can turn this stuff off, although you might decide to grin and bear it, since Taurus does occasionally come up with a useful (and sometimes life-saving) gem.

As mentioned, you'll really need some horsepower (under the hood of your computer, as well as your car) to get the most from *Interstate '76*, especially online. Because things can happen so quickly in the game you can't afford to have a sub-par processor adding its own lag time to the latency of your Internet connection. Beyond the more powerful (133MHz or faster) processor, you should have a good video accelerator board with at least 2MB RAM (4MB is better), rather than the 1MB specified. And while you can drive and fight using either the keyboard or a mouse, a good joystick or steering yoke is essential to true success. Presently, the game is only available online through Activision's own dedicated server, InterstateNet (connection already set up in the game) and play through this is excellent, as long as you heed Activision's warnings on modem combinations. By the way, be sure to pay a visit to Activision's I-76 web page (www.activision.com/i76/). It's a great resource, with its downloadable demo, as well as videos for anyone still undecided about buying the game. And if you already have the game, it's a real treasure trove of useful items, from a troubleshooting faq

(continually updated), and more detailed information about game characters and vehicles, to detailed instructions on how to set up modem play, as well as how to design your own "Multimelec Playground." There are also patches and game updates you can download for free.

It's hard to imagine any fan of road battle games not liking *Interstate '76*. The designers at Activision have managed to take a rather tired genre and use its clichés to their best advantage by wedding a great stylistic vision to



When in doubt, always go for the fuel tank.

a truly solid and well-tested game engine. There's no support for MMX (yet), but with a powerful computer you won't miss it. And that's the one caveat here—make sure you've got the computing horsepower before giving the game a try. If you do, you'll find *Interstate '76* an entertaining game on several levels.

—Gary Meredith



SubSpace

Developer: *Burst* Publisher: *Virgin Interactive*

It's only you and your fighter, blasting away at anything that moves...designed solely for online, multiplayer destruction.

DISTRIBUTION & PRICE:
Free download at www.vie.com

PLAY SITES:
Burst's 14 servers

PLAY RATES:
\$10-\$15/month (free during beta test phase)

SYSTEM REQUIREMENTS:
90 MHz Pentium or better
IBM-compatible PC with Windows 95/NT 4.0
Installed: 16 MB RAM, 2 MB PCI (or VLB) video card, 33.6kbps modem, Windows 95 compatible Sound Card.

NUMBER OF PLAYERS:
Dozens

DIFFICULTY LEVEL:
Intermediate

SubSpace is a blast from the past age of 2D space-shooters, with a top-down view and simple controls that will bring to mind such classic games as *Galaga* and *Asteroids*. Forget about plot or story: Here it's only you and your fighter, blasting away at anything that moves. And there's no single-player version available; *SubSpace* is designed solely for online, multiplayer destruction.

Players select from five different styles of fighter, ranging from a double-barreled gun platform to a stealth bomber. Each fighter has a distinct look and feel—one fighter might offer souped-up engines for speed, for instance, while another boasts a fast turn rate—and this allows a gamer to pick a fighter closely suited to his

or her style of combat. Guns, shrapnel-throwing burst weapons, missiles, mines, and special bombs are all available for the carnage connoisseur.

The free-for-all battles take place on a two-dimensional star field, with various wall configurations and phasing gates to make things interesting. Some maps have wormholes, which pull in ships and missiles and warp them to a random location. Players scramble madly for green power-ups that randomly upgrade guns, bombs, or speed; occasionally they provide options like stealth capability or extra-sensitive radar.

Of course, there's never enough power-ups for everyone—and that's where the fun begins. With everyone racing around for the goodies, the opportunities to help someone go out in a blaze of glory are endless—this game really does bring new meaning to the word “slayfest.” And while the power-ups increase the lethality of everyone, they never give bonuses for protection. Add in the fact that firing your own weapons drains your power supply, and you have an average player life span of about 5 minutes. Good stuff.

The game uses realistic physics, following the laws of motion and inertia in a frictionless environment. This means that if you thrust in a direction, you'll continue moving in that direction at a constant speed unless you thrust in a different direction. The same rules apply to your guns and

missiles. Fortunately, ships merely bounce off walls, and one of the most common power-ups allows your bullets to bounce as well. Another blessing is that your own shots (and the fire of your teammates) can't hurt you.

Team play is supported through the convention of a communications system: tune your frequency to that of another player, and you're teammates—an especially useful function in Capture-the-Flag games. Team members can limit their chatting with teammates only, and team members also share power-ups: With these incentives, teams are more common and the action is slightly less chaotic than a no-holds-barred melee. Some players have banded together to form regular squadrons, in the same manner as *Quake* clans.

SubSpace is incredibly entertaining and a notorious procrastination tool. It's easy to die, but with the shared power-ups for team members, it's easy to get back up to speed. The uncomplicated 2D play field and detailed, varied ships make for an engrossing and addictive game. A \$10-\$15 monthly rate may be a bit steep for just one game, but then again, this is the best game in its class. The vast multiplayer support, the ability to build unique squadrons, the tight graphics, and the nostalgic gameplay make this game an “A.”

—Mike Fehlauer



Safety first, especially when you're struggling to get to a Safe Zone.



Air Warrior II

Developer: **Kesmai** Publisher: **Interactive Magic**

For nearly a decade, the name *Air Warrior* has been synonymous with online flight simulation.

While others theorized and fantasized about “virtual reality,” *Air Warrior* delivered a true virtual world allowing dozens of humans to interact in a 3D environment.

Despite numerous patches and upgrades over the years, however, *Air Warrior* has grown long in the tooth and in dire need of an overhaul. That overhaul has arrived in the form of *Air Warrior II*—but unfortunately the new version is something of a mixed bag. In some ways, *Air Warrior II* is a major improvement over the original, yet in other ways it falls disappointingly short of the mark.

From the very first days of *Air Warrior*, there seemed to be an unwritten rule that a flight sim may contain an off-line game or an on-line game, but not both at the same time. The current crop of online sims have woefully inadequate off-line components, but *AWII* is a welcome exception to this rule: It allows users to fly all 35 planes in over 300 off-line missions in several theaters ranging from WWI through Korea. And that's not all: Kesmai threw in a mission builder, along with ground attack missions featuring flakpanzers, tanks, Jeeps, and trucks. The game's strategic component makes good use of those ground vehicles, allowing simultaneous air and land attacks against enemy airfields.

The game also includes a surprisingly detailed specifications section. Instead of rehashing spec

and altitude numbers, *AWII* actually provides color graphs comparing performance between the various planes. Unlike the competing online sims, *AWII* includes a thorough manual plus a guided walkthrough in the software itself. Coupled with an array of background sounds, *AWII* has substantially improved upon the interface of the original version.

But the flight-simulation component shows disappointingly few advancements; at first glance, in fact, you might wonder if there were any improvements to the graphics at all. *AWII*'s flight model reportedly received numerous tweaks and upgrades, but shows no substantial improvement over its predecessor. On the plus side, *AWII* features the industry's best stall buffet and recoil effects; on the downside, it has no torque or trim effects. The flight model handles AOA (angle of attack) reasonably well, but the aircraft doesn't feel very fluid; the nose tends to “stick” after releasing the controls. Overall, *AWII* made surprisingly few improvements to the flight model, especially when compared to such contemporary products as *Warbirds*.

To fly online, users must have either an AOL, CompuServe, EarthLink, or GameStorm account. Once online, *AWII* features separate arenas: “relaxed realism” for novices, and “full realism” for veterans. As the name implies, the relaxed realism arenas offer more forgiving flight models,

and as a general rule tend to sport more players than the full realism arenas.

Overall, *AWII* is a good product, but it missed an opportunity to once again set the industry standards for online flight simulation. It would appear that *AWII* is becoming increasingly popular with the “soft-core” simulation fans while, presumably, the hard core fans have migrated to other products. Just how good or bad that is, of course, depends on how much of a premium you place on realism—but that doesn't mitigate the fact that the graphics and flight model show little or no improvements over the original.

—Tom “KC” Basham

DISTRIBUTION & PRICE:	Retail, \$49.95
PLAY SITES:	America Online, CompuServe, EarthLink's Arena, GameStorm
SYSTEM REQUIREMENTS:	486/100 or faster, 16MB RAM, 2X CD-ROM, SVGA
NUMBER OF PLAYERS:	1-120
DIFFICULTY LEVEL:	Intermediate to Advanced
URL FOR FURTHER INFO:	http://www.imalcgames.com



Air Warrior II gives you the chance to fly in four theaters of air combat spanning three conflicts, including the nascent days of dogfighting in World War I.



Multiplayer BattleTech: Solaris

Developer: Aries Online Games Publisher: Aries Online Games

Even if you're not a big fan of action games, you really owe it to yourself to get online and try your hand at *MBTS*.

DISTRIBUTION & PRICE:

Download from online services or by ftp at: <ftp.ksnml.com/games/BattleTech>

PLAY SITES:

America Online
CompuServe
Delphi
Earthlink

SYSTEM REQUIREMENTS:

486/66 8 MB RAM,
SVGA with 1 MB RAM,
Windows 95

NUMBER OF PLAYERS:

1-8

DIFFICULTY LEVEL:

Intermediate to
Advanced

URL FOR MORE INFO:

www.ariesgames.com/games/battletech/help/battletech.faq.html

The more I play, the harder it is for me to log off and get back to the real world—and that's a pretty high compliment for any type of game. Set in the year 3025, all the action in *MPBT* takes place on Solaris—a planet whose only purpose is to provide a place for MechWarriors (the guys who control towering, heavily armed robots call battlemechs) to meet and duel. Solaris is divided into five sectors each consisting of five districts; within each district are five arenas. After you've chosen a handle others will know you by, you can travel to any arena in search of battle—though newbies should probably warm up with a few matches against computer controlled drones before taking on human opponents.

Once you're ready for the real thing, there are a variety of ways to fight: one-on-one, team matches with one to four 'mechs on each side, or free-for-alls where it's

every warrior for himself. In practice arenas, the only damage you'll take is to your pride; in a sanctioned arena your official ranking is affected by the outcome of the battle and your opponent's rank.

Most gamers will lose quite a few matches at first. Many of the players you'll meet on Solaris are pretty hardcore MechWarriors, and can finish rookies off with a few well-placed shots. (Fortunately, every veteran player I've chatted with has always been ready with tactical advice and general pointers.) But a bigger reason for a lot of losses early in your career is that *MPBT* is so well-designed that any action hound can hop in a 'mech and start blasting away after a only quick glance at the manual. And while you might pull off a win or two like that, it's essential that you understand the unique capabilities and limitations of the dozens of mechs available if you hope to climb up the pecking order of MechWarriors. The polygon-based graphics aren't exactly cutting

edge—about the only noticeable textures you'll see used are for terrain—but once you've experienced the exhilaration of blasting the arm off an opposing mech you'd probably be willing to play in EGA. Sound effects and music, on the other hand, are nearly faultless: With a good set of speakers and subwoofer, the sounds of missiles exploding and lasers firing evoke a visceral rush that pushes *MPBT* into the virtual reality zone. And the music is so well-synched to the action that you'll actually leave it on while you're playing!

I'm making *MPBT* sound perfect, but there are a couple of things I'd like to see changed. The biggest shortcoming is that because the game can't even be launched offline, you must pay to practice—a pretty raw deal for users paying fairly high hourly rates. You also have no control over what mechs computer opponents will use (they're automatically assigned the same type as you). Finding a sanctioned match can gobble up time, and just like any online game you can expect occasional disconnections while playing *MPBT*.

I'll wrap up with words of advice and warning. The advice is obvious: Get online and experience this action for yourself. The warning? If you're paying an hourly rate to play *MPBT*, don't be surprised to find yourself staring at some steep gaming bills.

—Stephen Poole



The polygon-based graphics in *Multiplayer BattleTech: Solaris* aren't what you'd call cutting edge, but combine them with intense combat sequences and extremely convincing sound effects and they're more than good enough to create a "you are there" sensation.



A combination of static images (bottom left) and textual information (bottom right) is used to show your location on Solaris. It's a bit clunky, but once you're accustomed to it you'll be zipping between arenas in no time flat.



Helicops

Developer: Paragon Visual Systems Inc. Publisher: 7th Level

Classic anime: The metropolis of Neo-Tokyo has been built over the ashes of old Tokyo, but all is not right...

American interest in Japanese animation (anime) is on the rise again, at least partially due to the large number of anime-influenced game titles such as *Street Fighter* and *Virtua Fighter*. But a huge aspect of anime has been denied hard-core gamers: high-tech aerospace combat. No longer. *Helicops* has roared into the arena, a straight game interpretation of classic aerial anime combat.

Even the premise is classic anime: the metropolis of Neo-

Tokyo has been built over the ashes of old Tokyo, but all is not right in the new city. The U.N. has been dissolved, the world is sinking into anarchy, the evil crime syndicate Nemesys has moved in and it's up to a band of renegade Helicops to save the city.

Players get to choose from five pilots and five high-tech helicopters, all with various strengths and weaknesses. The 'copters mount an impressive array of weaponry, augmented by floating power-ups. The gameplay and control are identical to any number of console "flight sims;" players can concentrate on killing and not worry about the actual mechanics of helicopter flight.

The graphics are nowhere near real anime quality, but they give a good representation, both in shape and behavior. Also, the very basic quality of ground, building, sky, and vehicles allows a large amount of action to

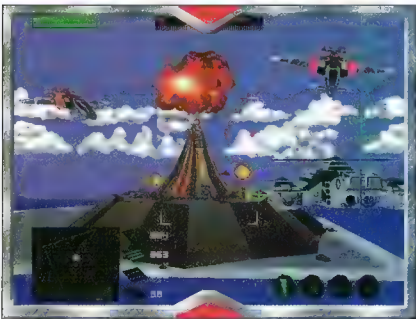
pursue the mission objective(s). After completing a set number of missions, the helicop squares off against the obligatory boss. Mission objectives vary from rescuing civilians to making seek-and-destroy runs to jacking into a computer core and combating an evil AI. This variety and the choice of helicopters, each tailored for specific mission roles, saves the game from becoming monotonous. Even so, *Helicops* is definitely not a marathon game; it's more suitable for those times when you just want to, as the game box says, "grab your stick and play." The only multiplayer support is a deathmatch, disappointing since the Helicops themselves are a team. It would have been nice to tackle the minions of Nemesys with a buddy.

If you want an aerial combat game that's light on realism but high on action and destruction, *Helicops* may be the game for you. It's a decent entry into the anime genre, and definitely satisfies those with console envy. Still, it could be a little more impressive graphically, multiplayer support should have allowed cooperative play, and more could be done with the pilots (maybe some out-of-cockpit adventure?).

—Michael Fehlauer



Down and dirty on the mean streets of NeoTokyo...



The graphics aren't cartoony, yet aren't up to flight sim standards.

DISTRIBUTION & PRICE:	Retail, \$39.99
PLAY SITES:	(LAN or modem)
SYSTEM REQUIREMENTS:	P100, 8MB RAM, 4x CD, 22MB HD space, 256 color display, 640x480, MPC compatible sound card and amplified speakers
NUMBER OF PLAYERS:	1-8
DIFFICULTY LEVEL:	Intermediate

ePLAY
RATING **B**

Darklight Conflict

Developer: *Rage Software* Publisher: *Electronic Arts*

If you considered *The Last Starfighter* an ultimate fantasy, your dreams will come true in *Darklight Conflict*.

DISTRIBUTION & PRICE:

Retail, \$49.95

PLAY SITES:

Kali, LAN

SYSTEM REQUIREMENTS:

PSD (VGA version), 8MB
RAM 50MB of HD
space, DOS 6.2 or
higher, 4X CD-ROM

NUMBER OF PLAYERS:

1-8

DIFFICULTY LEVEL:

Easy to Intermediate

URL FOR FURTHER INFO:

<http://www.ea.com/eastudios/dark>

In the role of a human fighter pilot—who's abducted by an alien race called the Reptons in a last-ditch effort to turn the tide of an interstellar war—you're biomechanically altered for space combat. A gruff Repton mentor leads you through several training exercises, starting with simple navigation and moving on to basic and medium weapons and heavy ordnance. Once you're deemed suitable for service, you enter the ranks of the Repton military.

Visually, the game is an absolute gem. Beautifully rendered 3D ships vector and twist around each other under the baleful glow of a green sun. Missiles spiral away toward targets, looping around for another pass if evaded. And the explosions are amazing. No generic orange and red clouds superimposed over targets: Each ship-type has its own unique explosion effects, complete with unique debris and spark spreads.

One of the coolest aspects of the game is the degree of graphic realism. If a bomber has a complement of six missiles, its graphic

will show six missiles mounted on its wings—and if the ship launches one, that missile will detach and streak toward the target, leaving five on the ship! It's a small detail, but it's a great feeling when you're in the middle of a battle and begin to panic when you come face to face with an enemy torpedo boat—only to have the panic replaced by the anticipation of your next kill when you see the enemy's out of ordnance!

The gameplay is very fluid, with a simple interface that enhances the atmosphere of the game. For example, your craft's shields are activated by holding down the primary fire button, reducing the number of inputs needed for play and linking the shields with the most-used button or trigger. If I'm blasting away at my foes and suddenly see a flock of enemy missiles filling up my screen, it's almost instinctual for my grip on the stick to get tighter and to squeeze down my primary fire button. Nice touch.

The game itself is pretty deadly; hit-and-run raids and ambushes are the norm. While on a routine mission detonating asteroids to clear a path for your carrier, don't be surprised to see laser fire lancing into you: The enemy loves to hide, and it doesn't help any that your radar lists the ambushing ship, like the asteroids, as a generic

"threat." *Darklight Conflict* is a beautiful space fighter game with some of the best visual and audio work I've seen (and heard) in a game. Its eye-popping graphics, intense combat sequences, and compelling storyline make the single-player game a candidate for an A rating. Unfortunately, it seems the multiplayer capability was thrown in as an afterthought. The game looks and plays the same, but all players are forced to square off with the exact same ship (the generic, low-level fighter), with the exact same armament. This is fun for all of about 10 minutes, after it's obvious who the better pilot is and the losing player gets bored. And there's no chat feature, or at least none listed in the documentation.

It doesn't seem that it would have been too hard to have come up with more multiplayer options, and it's too bad that the game shipped with only LAN support—its lack of Internet or modem support means that the vast majority of users won't get to experience even the limited multiplayer mode. I managed to get a game running on Kali, but at 500ms ping times it was pretty much unplayable.

There might yet be hope, however. EA says there'll be a modem-support patch on their Web site by the time this issue hits newsstands, and EA's recent agreement with Mplayer gives us hope that it'll be supported on that service, too.

—Michael Fehlauser



Another great example of light sourcing.

Comanche 3

Developer: NovaLogic Publisher: NovaLogic

This sim lets you fly a 'copter that the army won't even get to play with for another 3 or 4 years.

One aspect in judging a flight sim is whether or not it offers incentive and motivation to master your flying skills. *Comanche 3* does just that...in spades—so much so that I wouldn't be surprised if it produces quite a few aspiring helicopter pilots.

Based on Boeing-Sikorsky's new RAH-66 Comanche stealth helicopter, this sim gives you a chance to fly a 'copter that the Army won't even get to play with for another three or four years. The developing team spent a good deal of time at Sikorsky's headquarters, talking to the engineers and trying out the company's own simulator to capture as much realism as possible.

C3's greatest strength and most dazzling feature is its nearly photorealistic terrain. Each mission places you over a new and stunningly expansive landscape, over 80 square miles in all. Cloud patterns move subtly and naturally over the virtual ground, a small detail that's indicative of the care NovaLogic took to make sure the experience was as lifelike as possible. And NovaLogic made sure its graphics wouldn't go unappreciated—there's a whole slew of perspectives and views available here (my favorite is the rotating camera view that lets you see just how cool you look as you destroy everything in sight). The explosions seem a little light, but the lack of mushroom clouds and miles of billowy black smoke is a small

omission compared to the visual realism NovaLogic has captured.

Piloting a helicopter isn't easy, and neither is C3. NovaLogic's attention to the physics of torque, momentum, and collective and cyclic control means players unaccustomed to 'copter sims will need to spend time reading the manual and going on training flights; mercifully, there are some to make flight a little easier for players ready to get airborne immediately. Make sure you keep the keyboard map out—all but nine keys have some special (and usually essential) function. You can reduce confusion and really experience the feel of piloting by using a four-button stick (with hat switch), a throttle, and rudder pedals.

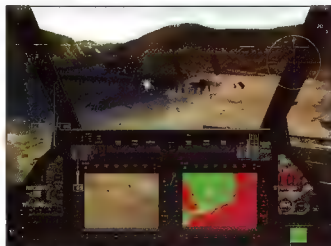
Once you know the difference between your cyclic and rotor control and get the hang of changing altitude without landing on your butt, C3 gets really interesting. Even if you tire of missions or your flights, you'll still be tempted to spend hours hot-dogging around mountains and over trees.

If you've never tried a realistic flight simulation, though, you might want to take a look before you buy. Action fans may find that 70 knots (the top speed here) feels painfully slow when you're in a hurry, and they might be dismayed to discover that a helicopter doesn't stand up to missile hits very well. But serious players will be rewarded for their skill and patience: C3 has a whole slew of

little features to take advantage of when you're on a stealthy sneak attack. The 32 combat missions should keep you busy for a while, and when you factor in multiple players for either flying cooperatively or head-to-head co-op and head-to-head multiplayer action over a LAN, Internet (a trial version of Kali software comes with the game), or modem-to-modem, you can feel confident that C3 won't bore you anytime soon.

If you're not into the realism of C3, it's going to lose a lot of its impact. It takes time for newcomers to gain valuable skills, and experience counts a lot. This game's strength lies in its complexity, both visually and aerodynamically—and it's very strong in both departments. If you're looking for the most accurate, best-looking attack helicopter simulator, you just found it.

—Marshall Lammers



The cockpit and helmet displays give you any information a pilot could need, along with a decent windshield view.

DISTRIBUTION:

Retail, \$44.95

PLAY SITES:

Kali, LAN

SYSTEM REQUIREMENTS:

PC CD-ROM with DOS, Windows 95 or later, Fast Pentium recommended, VGA or better; 16 MB RAM; 2X CD-ROM; Sound Blaster, SB 16, SB Awe32 or compatible audio card;

NUMBER OF PLAYERS:

1-10

DIFFICULTY LEVEL:

Advanced

URL FOR FURTHER INFO:

www.novalogic.com



Scarab

Developer: Electronic Arts Publisher: Electronic Arts

The premise for *Scarab* falls squarely in the “high weirdness” category...Mech Warrior with Egyptian Gods.

DISTRIBUTION & PRICE:
Retail, \$44.95

PLAY SITES:
Mplayer Free Zone, Kali,
Direct Play TCP/IP

SYSTEM REQUIREMENTS:
BM PC
Pentium 90 (Pentium
100 Recommended)
32 MB install space
16 MB RAM
4X CD-ROM Drive
Keyboard, Mouse
(Joystick recommended)

NUMBER OF PLAYERS:
1-6

DIFFICULTY LEVEL:
Intermediate

URL FOR FURTHER INFO:
<http://www.ea.com>

You know, I spend a lot of time online, and I often read complaints that games should be more sluggishly paced and should suffer from chunky graphics, mediocre textures, convoluted play, poor controls, and indifferent level design. Thankfully, EA has answered this clamor with *Scarab*, which should please those gamers who are tired of exciting, sensible, and entertaining gameplay.

The premise for *Scarab* falls squarely in the “high weirdness” category. It’s ancient Egypt and Ra, the sun god, is locked in a deadly struggle with the evil Osiris—and they’re both space aliens! The battlegrounds for this showdown are the cities of ancient Egypt, complete with pyramids, tombs and...well, not much else. Each side maneuvers a robot, styled after figures from Egyptian mythology, in a fight for control of the cities and the very souls of its inhabitants.

The entire game is a convoluted affair—in its attempt to add a few twists to the action-game genre, EA has instead wound up with a pretzel. There are two sides (up to six in multiplayer) and each side gets their choice of robot through three incarnations. If you kill your opponent three times, you win. The other way to win is by placing “towers” throughout the city. These towers radiate energy which you can use to power up your shields; place enough towers, and you can win the game without even firing a shot. So you have two possible paths to victory: Through killing or through strategic placement of a power grid. Though it seems as if this should put an interesting new wrinkle in the old action format, it just doesn’t work.

The mix of robots is interesting, as are the weapons, and there are some little details that show some attempt was made to make *Scarab* unique. Your robot’s shields, for instance, are made of individual panels that form a geodesic-style dome: as you take hits, the panels begin to gray out, forcing you to rotate the shields in order to see. But just being different isn’t enough. Control is cumbersome to the extreme, with robots that are hard to steer and a perspective that doesn’t give you a good idea of just where you’re standing. There are horrendous clipping problems, with vanishing walls

and other visual quirks popping up from time to time.

Graphics are mediocre to poor: Triangles fly out of explosions, smoke is made of gray circles. Level design is both boring and confusing, making it difficult to navigate the various walkways and moving pads while in the big robots. The worst thing, however, is the pacing. This game’s so deathly slow that you wonder if the enemy will die of boredom before you kill him.

It gets slightly more interesting in head-to-head play, but not by much. DirectPlay TCP/IP didn’t work at all, but games over Mplayer ran quite smoothly (A new patch is available from the EA site that smooths play over Kali and TCP/IP connections. This site also hosts a large play ladder for ranking *Scarab* players.) At least in the multiplayer game you have a human to battle and taunt, but it doesn’t make up for the fact that running around picking up weapons, building energy towers, and—once in a great while—shooting at someone isn’t all that interesting. The chat mode also censors your taunts—not a bad feature in and of itself, but one which a parent or guardian should be able to toggle on and off.

In the end, *Scarab* falls apart despite—and partly because of—good intentions and ideas. Hmm, *Mech Warrior* with Egyptian gods: it sounded like a good idea....

—T. Liam McDonald



Shields in *Scarab* are transparent honeycombs that turn opaque as they take hits.



Warbirds

Developer: *Interactive Creations, Inc.* Publisher: *I-Magic Online*

...*Warbirds* is arguably the most thorough and generally realistic WWII air-combat simulation available...

From the moment you first fire up the engine, it's immediately apparent that *Warbirds* is a cut above the garden-variety air-combat game—this in spite of the fact that it has only a minimal stand-alone component, which basically limits players to test flying the various aircraft. Instead, *Warbirds* revolves around human-versus-human battles either through a head-to-head modem connection or by logging onto I-Magic Online's *Warbirds* service. Featuring 32 different aircraft variants, *Warbirds* offers little concession to rookies: players may configure flight difficulty for offline play, but there are no difficulty options for on-line play, and no "relaxed realism" arenas on the *Warbirds* service. Make no mistake: *Warbirds'* online arena is no place for the weak of heart.

The game itself is free via download from ICI's web site (see game info). Playing *Warbirds* on I-Magic Online carries a \$2.00 per hour connect charge—a fairly steep rate that is somewhat mitigated by the fact you're only billed while you're in the cockpit. And it's the online arenas that are the heart and soul of this game. Maintaining situational awareness with dozens of friendly and enemy aircraft in visual range proves challenging for even the most experienced head-to-head pilot.

Warbirds contains one of the most comprehensive prop-engine flight models available. Being the first—and only—PC-based flight

sim to model the effects of engine torque, new users may be in for quite a surprise on their first flight; simply taxiing onto the runway can be challenging. On the other hand, the otherwise outstanding flight model contains only mediocre stall effects. Although the aircraft realistically stall, there are no physical indications of an approaching stall except for an often annoying angle-of-attack horn.

Warbirds features an amazingly detailed damage model that allows very specific types of damage—you can lose a left aileron, experience oil leaks and elevator failure, and even have parts of the wings and fuselage shot off. Take it from me: You haven't experienced a true flight sim until you've tried to land a plane with no elevator, damaged gear, and an engine about to seize and quit at any instant.

Unlike other online flight sims, *Warbirds* features head-on shots and collisions. Whereas most sims don't allow collisions (and subsequently disable or limit head-on shots to prevent unrealistic flight paths), *Warbirds* pilots have to watch their closure rates to avoid mid-air collisions. Unfortunately, due to network lags, usually only one of the two colliding aircraft die. Further, despite the highly detailed damage model, any midair collision results in catastrophic damage and immediate death (for the unlucky of the two players). Hopefully, future game

versions will force both participants to register the collision while making better use of the damage system.

Warbirds' greatest liability is its spartan graphics engine. Despite the lack of texture or shading, the plane graphics are good enough to pull the plow—but the same can't be said for the simplistic terrain graphics. I've had a lot of experience with all sorts of flight sims, but in *Warbirds* I still planted my aircraft more than once because the terrain detail didn't sufficiently indicate just how close the ground really was. Fortunately, rumor indicates that *Warbird's* successor, due out this summer, will feature a substantially improved graphics engine.

Despite the complaints, however, *Warbirds* is arguably the most thorough and generally realistic WWII air-combat simulation available.

Coupling an excellent product with the thrill of human-versus-human gameplay makes for an incredible experience—and I-Magic Online gives you five hours free in order to test the service.

—Tom "KC" Basham

DISTRIBUTION:

Available via FTP at
<http://icgames.com> or
on the Web at
<http://www.icgames.com>

PLAY SITES:

I-Magic Online

SYSTEM REQUIREMENTS:

486Dx2/66,
16 MB RAM, PCI/VESA
videocard (DirectX
compatible), 40 MB hard
drive space

NUMBER OF PLAYERS:

Up to 100 players

DIFFICULTY LEVEL:

Intermediate to
Advanced

URL FOR FURTHER INFO:

<http://www.icgames.com>



With the ability to host over 100 players in a single combat arena, *Warbirds* does an excellent job of re-creating the swirling, swarming dogfights of World War II.



POD

Developer: Ubi Soft Entertainment Publisher: Ubi Soft Entertainment

POD is a fast and smooth rocket ride, even in multiplayer mode.

DISTRIBUTION & PRICE:
Retail, \$49.95

PLAY SITES:
Kali, DirectPlay TCP/IP

SYSTEM REQUIREMENTS:
Pentium 100 (MMX 166 recommended), 20 MB install space, 16 MB RAM, 4X CD-ROM Drive, 16-bit sound card, Thrustmaster Grand Prix or Formula T2 wheel (recommended)

NUMBER OF PLAYERS:
1-8

DIFFICULTY LEVEL:
Easy

URL FOR MORE INFO:
<http://www.UbiSoft.com/usgames/product.html>

At its core, *POD* is a rather simplistic racing game—a great-looking game—but a cut-and-dried racing game nonetheless. Of course, just because the game's simple doesn't mean it can't deliver healthy doses of fun and action, and that's what *POD* does.

POD's sci-fi premise is a little stilted, but that's nothing new for action games. A virus (called *POD*) has begun to spread on the planet Io, wiping out almost the entire population—except for you, of course. Your only hope for survival is a single spaceship available to transport one person off the surface of the contaminated planet. The catch? You must win a championship by hopping behind the wheel of a futuristic hot rod and racing on 16 different tracks.

And it's those tracks that are probably the most compelling feature of *POD*. The highly detailed circuits are reminiscent of a Frank Herbert novel, set in stark, futuristic cities with richly colored skylines. Each cityscape has its own distinct look, aided by visual details ranging from giant cicadas and spiders to collapsed bridges and abandoned cars.

The music is equally impressive, with a driving drumbeat that encourages you to race to the finish. Sound effects are good—you can hear your car shifting gears, engines echoing in tunnels, and the sound of metal on metal during crashes—but the lack of fiery crashes is a major letdown. We sent our car into one head-on

collision after another for 30 minutes, and even though the car was mangled and all damage indicators were glowing hot red, the car never exploded.

POD's interface is easy and simple—so easy, in fact, that the game comes without any written documentation. That's no problem in the single-player game, but the game's help screen doesn't explain the intricacies of the multiplayer mode or the lousy save-game feature (you can only save after every fourth race in a championship). The FAQ at the Web site has answers to these questions, but a manual—even a Quick Start guide—would be a big help.

Each of the game's ten cars can be customized in five different areas (acceleration, grip, handling, brakes, and speed); after you've made adjustments, you can head to the test track for practice. The testing option gives you a good idea of how your car will perform in an actual race, but you'll soon discover that setting the speed at nearly maximum and reducing the brakes to zero is pretty much all you need to do to guarantee victory (at least against computer-controlled opponents). Ubi Soft says it will provide new cars for *POD* owners at the "Ubi Online" site (only accessible through the *POD* software) but changing the



The post-apocalyptic, decayed urban landscape adds an element of menace and despair to *POD*.

chassis and switching cars isn't enough to keep you coming back to *POD* again and again.

The real stars of *POD* are the tracks—and Ubi Soft has already added several new (and very good) ones on its Ubi Online site. Also available are various player-recorded "ghosts" you can download and compete against offline. These allow you to race against some of the best *POD* players in the world—all offline! Yes, multiplayer gaming without the downside of latency and disconnections.

POD is fast and smooth, even in multiplayer mode. If you're not using an MMX system, it can get a little jerky when there are many cars on-screen, but once you break from the pack it settles down.

POD will seem simplistic for die-hard racing fans, and isn't the sort of game you'll play for hours on end. But for easy-to-master racing combining fast thrills with stunning graphics, it fits the bill.

—Adrienne Massanari



G-NOME

Developer: 7th Level Publisher: 7th Level

G-NOME puts a new twist on the "fighting robots" genre—the sheer panic of the man on foot who's about to be 'mech-trampled.

Though it changes the names of such robots from 'mechs (short for battlemechs, from the genre-defining *MechWarrior* games) to HAWCs, for the most part G-NOME is first and foremost a 'mech combat game. The intriguing story—four races, including humans, are engaged in a battle for precious minerals on a far-flung planet in the distant future—draws you in quickly, and its structure takes advantage of the inherent elements of the genre: Each race has its own types of HAWCs.

At first glance, the graphics in G-NOME are an improvement over those in *MechWarrior 2*, with considerably more detail and color. But the texture maps used on mountains appear to undulate, creating the impression that the terrain is as mobile as ocean swells. You probably won't notice it much during combat, but it still looks a little odd.

The basic controls are easy to learn, and extensive customization options let you assign commands to any key, mouse button, or joystick button or function. The response time seems a little sluggish, but isn't that always the case when someone's shooting at you?

Where G-NOME departs from traditional 'mech games, though, is with the addition of foot combat: You can leave your HAWC at any time, and even commander empty enemy vehicles. Although you might have a hard time believing there's a handheld weapon (the GASHR) that can eject an opponent from his HAWC, the ability to leave your HAWC is undoubtedly the most innovative aspect of the game. It's a great concept, and we'll probably see it in more 'mech games.

But it's the little things that make or break a game—and unfortunately the little things aren't on the side of G-NOME.

Although the available vehicles (15 in all) are varied, there's no way to customize them: Once you've seen one Darken Sentry HAWC, you've seen them all. There's no health display when you're on foot, so you have no idea how many more hits you

can take before you're a goner.

Another problem lies in the game's physics. For instance, the open area between the halves of a drawbridge isn't at all free or open: A craft that can fly over the river will slam to a halt against the bridge's super-strong air particles. There's also an invisible force field preventing you from toppling into gullies and rivers.

Last but not least, the game is *slow*. Run over a local area network on computers of varying speeds, the action took place at a sedate, calm pace—not exactly the atmosphere you expect when several heavily armed HAWCs are duking it out for survival. Internet play can be even slower due to latencies, and finding an opponent on Kali or via DirectPlay TCP/IP connection is no easy task (Mplayer plans to add G-NOME support, which should make it easier to find Net matchups).

G-NOME has a lot to offer, but I'll wait on a second version—and the arrival of Mplayer support before I rush out to buy copies for all my friends. Those addicted to the genre will appreciate the new elements, but others will be bothered by the game's inconsistencies and slow pace.

—John Cooking

DISTRIBUTION:
Retail, \$34.99

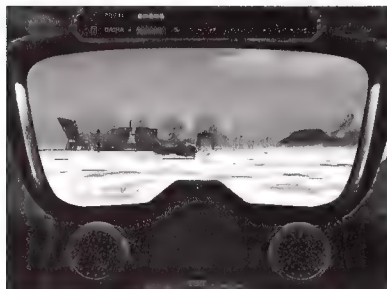
PLAY SITES:
DirectPlay TCP/IP LAN,
Modem; scheduled for
support on Mplayer's
Free Zone

SYSTEM REQUIREMENTS:
Pentium 90, 16MB RAM,
30MB hard-drive space,
4X CD-ROM,
Windows 95

NUMBER OF PLAYERS:
1-7
(recommended four or
fewer players for
DirectPlay TCP/IP)

DIFFICULTY LEVEL:
Intermediate

URL FOR MORE INFO:
<http://www.7thlevel.com>



Since the smoothness of multiplayer games depends on every player's system, you can find the game dragging even if you're playing on a rocking system—and that leads to frustration.



Chessmaster Online

Developer: Mindscape Publisher: Mindscape

...the software is free, the service is free, and—best of all—
it seems that there's always someone ready for a match...

DISTRIBUTION & PRICE:
Download free of charge
at <http://www.chessmaster.com>

PLAY SITES:
Chessmaster Online

SYSTEM REQUIREMENTS:
486DX2/66, 8MB RAM
3.5MB hard-drive space
SVGA, Mouse,
Windows 95

NUMBER OF PLAYERS:
1-2

DIFFICULTY LEVEL:
Easy

The idea behind *Chessmaster Online* is simple: Provide a first-rate chess site where users can meet with dozens of other chess fans and set up games quickly and easily. What makes this simple idea so compelling is that the software is free, the service is free, and—best of all—it seems that there's always someone ready for a match. Chat features include a language filter and options to “squellch” offensive users; gameplay boasts a flexible but intuitive interface, the ability to view others’ games, players spanning all skill levels,

excellent graphics, and an option to save your game for replay in the retail cousin *Chessmaster 5000* (the best all-around chess game on the market).

To support *Chessmaster Online*, Mindscape has created The Chessmaster Network. Here you’ll find real-life tournament listings, chess puzzles, downloads for both *Chessmaster Online* and *Chessmaster 5000*, the wonderful *Chessmaster Encyclopedia* (rules, glossary, grandmaster biographies, and chess history), and columns by grandmaster Larry Evans (which sometimes include games



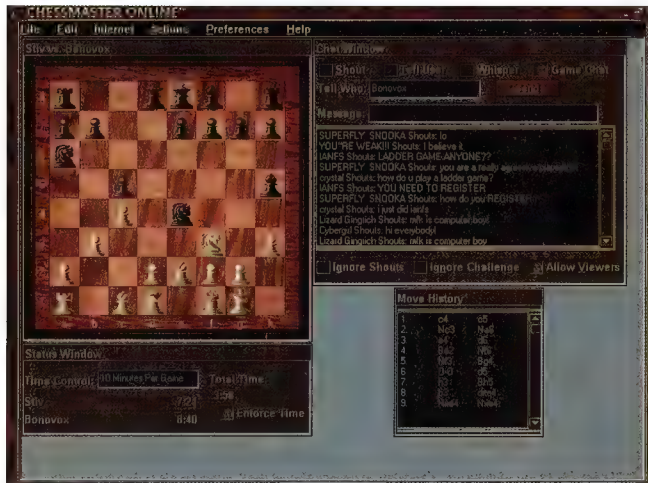
Mindscape’s Chessmaster Network provides support files for both *Chessmaster Online* and *Chessmaster 5000*, along with goodies such as a chess encyclopedia, chess puzzles, and a regularly updated column by GM Larry Evans.

you can download and view in *Chessmaster 5000*).

It’s hard to complain when it’s free, but *CM Online* could stand a few improvements. An option to view captured pieces, for instance, would be a big plus. The Online Information report will often show players available for a game, but when you challenge them it says they’re playing; check again a few seconds later, and it again says they’re still available for play. Sizable windows would also be welcome: The small windows used for player and games lists entail a lot of scrolling to see all the options.

Those complaints are minor, though, compared to the countless hours of free fun to be had with *Chessmaster Online*. If you like chess, this is an essential stop on the gaming superhighway.

—Stephen Poole



Though 3D boards aren’t available in *Chessmaster Online*, the 2D boards are beautiful—and an intuitive interface makes moving pieces, chatting with other other players, and saving games a snap.



War Wind

Developer: Dream Forge Entertainment Publisher: Strategic Simulations Inc.

Magic and technology mix—and for the most part the results are excellent.

War Wind builds on the strengths of such games as *WarCraft* and *Command & Conquer* to create a world where magic and technology mix in a struggle over the remains of a dying empire—and for the most part the results are excellent.

Set in a world called Yavuan, *War Wind* centers on four distinct species—Tha'Roon, Obblinox, Eaggra, and Chimyl—that come to life in an engaging tale centered around the collapse of Yavuan's

top-down view as you attempt to subdue your adversaries.

Though good looks aren't as important as well-designed gameplay, there's nothing wrong with beauty in and of itself—and *War Wind* is a very pretty game. Each of the races is well-defined and distinct, though that has a slight drawback: Because they are so alien, the various units within a single race are easily confused.

The mouse-based interface seems simple when explained in

the manual, but once you begin to play you'll probably find it counter-intuitive: The functions of mouse buttons are reversed from those of the standard Windows configuration (and from other games in this genre). Once a

with harmful (and annoying) creatures. And if that's not enough responsibility for you, you've also got to watch over and protect your leader. This seems exciting and grants the player an extra unit, and a powerful one at that. Unfortunately, it's worse than foolish to use this powerhouse, because if your leader dies the game comes to an abrupt and unpleasant end.

The multiplayer game offers a wealth of scenarios. Unlike *WarCraft*, these scenarios offer an opportunity to do more than simply slaughter your friends (read: opponents). Each scenario has a distinct objective—some involve racing to a goal, collecting artifacts, or even as many as seven “hunters” chasing an unfortunate “rabbit”—the eighth player. But all of this hinges on finding other players—and as interesting as the multiplayer games are, the bottom line is that *War Wind*'s fairly steep learning curve means it doesn't have nearly as many fans as a *Red Alert* or *WarCraft*.

War Wind is not for the faint of heart. It requires dedication to learn how to control the game, and this sometimes detracts from the wonderful and involving world it creates. Hardcore wargamers will not be disappointed, but most players—myself included—would do better to stick to more accessible titles such as *WarCraft 2* and *Red Alert*.

—John Cocking



War Wind's beauty even extends to strategic maps like these.

ages-old empire. The player(s) can take any of the sides in the conflict in four interwoven story lines, and because each side has distinct strengths and weaknesses (yes, they really do), gameplay is not only balanced, but deep.

If you've played *WarCraft* or *Command & Conquer*, you'll feel at home here: Gameplay centers on collecting materials for production and managing resources, and issuing commands to various units (including magical spells) from a

unit or group is selected, it can be given commands with hotkeys (which must be memorized, as no reminders are available onscreen) or through a pop-up taskbar called up by right-clicking on the unit—very difficult if it's in motion. *War Wind* is an elaborate game—there are a number of unit types to consider, including psionics and wizards, and each race has its own style of magic. In addition to other sentient opponents, the player has to contend

DISTRIBUTION & PRICE:	Retail, 49.95
PLAY SITES:	Multiplayer, LAN
SYSTEM REQUIREMENTS:	Pentium 60, 16MB RAM, 2X CD-ROM, VGA, Windows 95
NUMBER OF PLAYERS:	1-6
DIFFICULTY LEVEL:	Intermediate
URL FOR MORE INFO:	http://www.warwind.com



Seeing Red in Red Alert

Dear ePlay:

After working my way through all the Allied and Soviet missions in *Command & Conquer: Red Alert* and using the "skirmish" mode to practice multiplayer against computer opponents, I decided I was ready to go online on Westwood Chat and take on a human opponent. But it seems that nearly every other game I start either plays at a crawl or disconnects midway through the game. What steps can I take to make sure that I'll finish the games I start?

Keith R., Tallahassee FL

Keith, what's causing your problems is the Internet's old bugaboo, latency. Because Westwood Chat makes no attempt to "classify" users by their connection speed, most folks have no way of knowing if the game they're about to start will move as quickly as on a LAN or will drag, hiccup, and finally disconnect. Just asking where someone is located isn't a big help—a game against someone in your own city or state can be even jerkier than against someone on another continent.

But there's one step you can take to find out how smooth a game you can expect against someone on Westwood Chat. After you and your opponent are both in a game channel, one of you should select the other's name in the User List windows, then click on the "dice" icon just under the menu bar. A dialogue box will appear; click on "Internet Auto-Detect" or "Internet/LAN Auto-Detect," then click

OK. This sends the IP address to the other player, and they can use the PING command to see how good your connection is: PING [IP ADDRESS]. If it's under 500ms, you should be OK.

Direct X Drivers

Dear ePlay:

I'm having problems getting my video chip and DirectX to run smoothly under Windows 95. Where can I get help?

Bob L., Greensboro NC

Not an unusual quandry, Bob. DirectX programs usually install the drivers you need when you initially run the setup program. Sometimes, especially with newer video boards, you'll need to directly intervene to update Windows 95 and your video drivers. Check your board manufacturer's web site for the latest drivers (and instructions for installing them). You can find an easy link at ePlay's site: www.eplay.com. If you don't already have Microsoft's Service Pack 1 updates running on your system, you should also check Microsoft's web site at www.microsoft.com for the location and instructions for downloading and installing Service Pack 1 and the DirectX 3 application. Scroll down to Action Games and then select Download Free Software. Under Support Drivers, Patches and Service Packs you'll find both the Software Support Library and Windows 95 Updates. Select and then search on Windows 95 to reach the Service Pack and Driver Updates.

Another excellent source of information

is the S3 site at www.s3.com. Once there, click End-User FAQ for DirectX games. S3 manufactures the Virge and Trio64 families of chips. Visiting manufacturer sites is one of the best sources of information for current trouble-shooting and the latest drivers.

Climbing the Ladder

Dear ePlay,

I've been playing *Descent 2* online a lot lately (probably too much, but that's another story). I feel like I'm getting pretty good, but how do I know that the people I'm wasting aren't just lousy players? Is there any way to find out just how good I am compared to other *Descent 2* players?

Roland M., Scottsdale AZ

As a matter of fact there is, Roland. If you point your Web browser to <http://www.igl.net>, you'll find Case's Internet Gaming Ladder. The concept is simple: after signing up for the ladder (it's free), you go to the gaming site of your choice and ask if anyone would like to play a ladder match of the game of your choice (there's a Kali server dedicated to Case's Ladder games). If you beat someone ranked higher than you, you advance halfway from your spot on the ladder to theirs; the only way you drop on the ladder by losing is if your opponent is ranked directly under you. It's up to the loser to report the results of a ladder game, and most people are pretty honest about it.

TEN has sophisticated rankings for several of its games, but *Descent 2* isn't one of them.

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Quake Skins

Dear ePlay

I just downloaded *Quake* World and logged on to a server to play—and then I spent the next ten minutes waiting while a bunch of files downloaded. The files turned out to be “skins”—new outfits to replace the usual stuff you see someone's character wearing. What are these skins, and can I get one for myself? They look very cool.

Jeff A., Winston-Salem NC

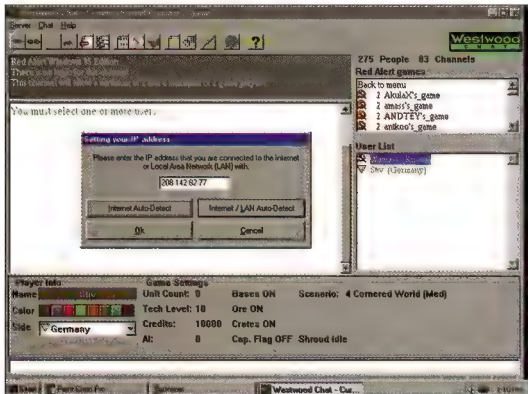
Hi, Jeff. In order to create and use skins in *Quake* World, there are several things you need to do. The first is to download the latest skin pack and place it in your *Quake* World directory; this means that if you join a game with players using skins in the skin pack you won't have to stop and download the files. Included in the Skin Pack is a README.TXT file that tells you how to create, format, and save a skin you're creating. Once you're finished, you can submit your skin via email to qwskins@idsoftware.com using a form included in the README file.



Case's Ladder is a great way to find out just how good you really are compared to other Net gamers—and it costs nothing to join.

Skin submissions are currently only for clans, not individuals (though there's nothing to stop a server from having non-clan skins available). To start a clan, you need at least five members, a Web site, a team name, a team logo, and an email address. If you've got all that stuff, head to <http://www.mpog.com/clanring> and get in on the action!

Address your questions to email@eplay.com, or send us a note from our web site, located at www.eplay.com. As is always the case, the various URLs listed in the above responses are subject to change.



If you send your *Red Alert* opponent on Westwood Chat your IP address, they can use the PING command to find out if you're located close enough in cyberspace for a smooth game.

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"Ask Dr. Latency"

Dear Doc: I've noticed that whenever I stay up all night playing *Red Alert*, my REM sleep is disturbed by attending classes the next day. What should I do?

Sleepless 'n' Be-addled.

Dear Sleepless: Do nothing. REM deprivation has been shown to be an excellent inducer of latent hostile-aggressive tendencies. A few more nights of REM deprivation and you'll discover the *real* you.

Dear Doc: Is it true that there's a relationship between your personality and your style of game play?

Faulty P. (Name withheld by request.)

Dear Faulty: I'm glad you asked that question. There certainly is. In my recent extensive, comprehensive, and exhausting study, published in its entirety in the latest issue of the *Sociological World Abstracts Technical-Elite Monthly* (SWAT-EM), I categorized online gamers into several categories. Here are a few:

Whiner (aka Poor Workman)

It's always the joystick's fault when they lose—which is frequently.

Trashmouth (aka *\$&#)

Can't make a *\$&# comment without @*\$%!!!

The Mentor (aka "Teach")

Patient and helpful; always willing to provide assistance to new players, even at his or her own expense.

Bait (aka New meat)

New players who get repeatedly fried while trying to learn the ropes.

Dear Doc: It seems that almost every time I'm about to win a critical battle in a game, my Internet Service Provider goes down. I'm beginning to get paranoid. I can't take much more of this. What do I do?

Quaking in Quebec

Dear Quaking: You aren't paranoid at all.

You've stumbled onto a little known but interesting fact of online gaming. You've found the *Disconnectors*. These are ISP employees who are paid to monitor game traffic and disconnect you at crucial moments during game play. This is actually part of an

ongoing study in "frustration tolerance" funded by major computer manufacturers and the IRS. Findings from this research are used in everything from the design of human-machine interfaces to development of new "simplified" IRS forms. Hope that helps.

Dear Doc: Is there a relationship between Prozac and diminished interest in gaming?

Mixed up in Memphis

Dear Memphis: While there is clinical discussion of a connection between Prozac and diminished interest in certain *personal* pursuits (which are beyond the scope of this column), we know of no current research in the specific area you mention. I suspect that there may be a relationship between diminished interest in these unnamed *household* pursuits and increased interest in gaming. But then again, there may be truth in the old adage, "The family that plays together, stays together!" Here's a pertinent comment from another reader:

Dear Doc: Since my partner started playing *Fighter Ace* 17 hours a day, I find that the only way I can get any attention is by dressing up as a B-52 Bomber. I think something's wrong here. What do you think?

Off-the-runway in Des Moines

Dear Off: You're absolutely right. Being forced to dress up as a B-52 to get attention is shocking and revolting. In a normal gamer's household, a Spitfire or a P-38 ought to be sufficient. I suggest you get professional help immediately.

Dear readers, that's all for this time. See you next issue. And remember: If you have suggestions for Dr. Latency, send them along to "Ask Dr. Latency" at email@eplay.com. Dr. Latency does this for nothing, which is what you'll get for sending something in. And remember, Dr. Latency is not a doctor or anything. He's a joke. That's what makes him so fascinating! Any resemblance between questions and answers and real issues is entirely accidental. ©

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